





PARADISE LOST.

THE Peris pleading for admission to the pharmaceutical paradise have been most unmistakably repulsed for the present if not for all time. On whose side the stars in their courses will fight remains to be seen. In Moore's famous poem the glorious angel who kept the gates of light was touched when he saw the Peri weeping without, and encouraged her to hope for admission in the future. Our glorious angels, on the other hand, receive our peris with merry jokes, and in response to their entreaties assure them in plain words that they will not admit them unless by order of the law. If women pharmacists and their friends are determined to continue the fight, they must go to the Court of Queen's Bench for a *mandamus*, calling on the Pharmaceutical Society to show cause why they exclude them. If they get the *mandamus* the Council will be prepared to produce a copy of *Punch*, and the history of the past 4,000 years, in support of their action in this matter.

So stands this interesting question at this moment. We find ourselves on the losing side, but, believing, as we do, that the discussion on the 21st of May fairly reflected public pharmaceutical opinion, we could not wish that a victory should have been snatched by inadvertence. Neither have we the slightest intention of impugning the wisdom of the majority. Least of all is it our desire to see the contest continued either in the Pharmaceutical Society or in the law courts. It is by no means a question of vital importance. Women have as perfect a right and as easy a road as men to become chemists and druggists or pharmaceutical chemists if they choose to go through the requisite training, but they are not to be members of the Pharmaceutical Society. If Blue Beard's experience is worth anything, the closed closet will possibly prove more alluring to the sex than all the other attractions of our business, while it is almost certain that if the door had been left open, and no stir at all had been raised, the number of petticoated members joining the Society would scarcely have reached five in a century.

ANOTHER GLOBULE.

THE ingenious youth, so charmingly free from any trammels of conscience, whom our old-fashioned contemporary, the *Globe*, has found such a useful instrument, and who figured conspicuously as the "Amateur Out-Patient" a short time ago, has been inspired with a new idea, equally worthy of him. This time, however, he follows the rôle of the sensational article writer of the *Daily Telegraph*, and steps into a sphere evidently more congenial and suited to his habits and tastes. Having got himself up in suitable costume,—in the guise of a fern seller,—he tramps the streets, and preys upon the charity of the soft-hearted and the gullibility of the charitable. His object, a most despicable one, is no other than to see how much he can get out of the passers-by, by feigning a misery he knows nothing of. He describes how at the close of an unsuccessful day's eadging, he was called over to a house, where a lady bought from him a shilling's worth of ferns, and gave him bread and cheese and—sherry! These are his own words:—"In a few minutes I was sitting on the grass plot, with a great glass of sherry and a plate of

bread and cheese before me, whilst the little maid stood by smiling. 'Will you have some more sherry?' said the girl, when I had finished. I nodded. [Naturally.] And more sherry, and more bread and cheese soon came; whilst I knew that through the stained glass of the conservatory those benign eyes were dwelling lovingly on the old man's feast. What I felt I would rather not relate. To me there is, and always must be, something holy about that true woman's charity." It would have been better if he had never related it. A more degrading confession has seldom been made by a gentleman of the fourth estate. A sweet gentleman this, to rave about the holiness of a true woman's charity! Surely the *Globe* might find some better occupation for its contributors than sending them about London to poison the springs of charity, and swallowing up double portions of bread and cheese and sherry intended for more honest beggars.

WINSLOW'S SYRUP.

THE *Canadian Pharmaceutical Journal*, in reproducing the report of our experiments on Winslow's syrup, in which, it will be remembered, we could find no trace of morphia, even with the most delicate tests, mentions a series of experiments conducted by itself which led to exactly the same conclusion. Our contemporary believes that the syrup is either not always of the same composition, or, more probably, that Mrs. Winslow's imitators are not so scrupulous about the quantity of narcotic supplied to infants as the old lady herself seems to be. The *Canadian Pharmaceutical Journal* agrees with us that the oil of aniseed is the active agent in the nostrum, and remarks on the somewhat unappreciated value of this medicine for allaying the troubles of infants, even when it is mixed by other hands than the motherly ones of Mrs. Winslow.

WATER CONSUMPTION.

THE oft-quoted remark of Lord Palmerston, that "dirt is but matter out of place," may be taken as an instance of the immense confusion and unhappiness which inevitably result from misapplied means. The daily consumption of water in New York is eighty million gallons—being nearly triple that of ten years ago, the population having meanwhile only increased one-eighth. To think that the majority of the population had become teetotallers, would be an insult to the national pride of America; to assert that abstinence operations demanded the enormous increase would be to fly in the face of fact, and the only conclusion is that something like half of the daily supply of water in New York is allowed to run to waste. It is stated that in the higher parts of the city, the occupants of the upper floors are totally deprived of water by reason of the enormous waste going on in the lower portions of New York. At the wharves and docks water is kept continually running through the pipes, in order that they may not freeze, and thus a far greater volume than necessary is lost.

For all this of course the piper must be paid; and the burden of doing so unfortunately falls as heavily upon the careful, economical water user as upon its most reckless waster. Nor will any change for the better take place till the authorities take the matter in hand, and introduce water

meters. In the city of Boston, in the year 1855, the daily consumption was ten million gallons per day; in 1865, it was nearly twenty millions. To reduce this inordinate increase, water meters were introduced, each consumer thus paying for the exact amount used. In a short time, the daily average was reduced to twelve million gallons, and now, with a large increase of population, it is only fifteen million gallons, or sixty gallons per head, while in New York it is double that amount.

In London the supply is below twenty-three gallons per head. And judging from the self-evident condition of the "great unwashed," this modest individual allowance must undergo considerable evaporation before it reaches the consumer.

THE BELFAST APOTHECARIES.

FROM a report which we publish in this number, it will be seen that from peaceful motives the Executive Committee of the British Pharmaceutical Conference has resolved in 1874 to depart from the custom which it has hitherto followed of meeting annually in the same town as that chosen by the British Association. In that year Belfast is the city selected by the Association, and in the ordinary course would be visited also by the Conference. But the present ferment in Ireland between the druggist and the apothecaries seems to have roused a little war between the classes, and the apothecaries, in the most polite and friendly terms, have pretty plainly intimated to the Committee that they should certainly refuse to attend the meetings if the druggists were to be admitted also. The Conference, through its Executive Committee, disclaims any political bias, and is no doubt rather awkwardly fixed. If supported by the druggists of Belfast only, it would lose the aid of many of the best pharmacutists of the city, and besides would seem to be supporting that class. But none the less in deciding to keep away has the Committee thrown its whole weight into the apothecaries' scale. We cannot but think that a little too much pliancy was manifested. The British Pharmaceutical Conference ought to have no cognizance whatever, of local or general trade disputes. It certainly would not have been desirable to go out of the way in order to cause a difficulty of this kind, but when the difficulty comes in its legitimate road, it ought to proceed, calmly and majestically, crushing the obstacle. The Irish druggists, as far as we can judge, are only making a fair demand, and it is much to be regretted that the apothecaries should show such a spirit as from the recent deputation to London we must presume to exist in some parts at any rate.

NEUTRAL CHORAL HYDRAT.

THE new German Pharmacopœia requires choral hydrat to be neutral. That is a demand which even the manufactory patronised by Liebreich, the discoveror of chloral hydrat, could not maintain; all chloral hydrat produced in those works had an acid reaction. It has been proved by repeated trials, and practically, that chloral hydrate, uncrystallized by whatever process prepared, or by whatever solvents dissolved, and again crystallized, even after adding alkali to the solution, *cannot* be neutral, but *must* have an acid reaction. Notwithstanding this, a so-called neutral chloral hydrat, which professed to be not only not acid, but actually of an alkaline reaction, made latterly its appearance with great pretensions, from a factory in Ludwigshafen, near Mannheim.

After a minute examination in the works of Schoring, in

Berlin, where principally, and at present almost exclusively, so far as Berlin is concerned, chloral hydrat is manufactured, it was found immediately that carbonate of soda had been mechanically mixed with this chloral hydrat, in order to produce the otherwise impossible reaction. Effervescence could be distinctly observed on saturating it with acid; by heating a residue was left, and by a partial solution, first when the carbonate of soda was acted upon an alkaline, and when the chloral hydrat did dissolve, an acid reaction was obtained. The crystals soon became discoloured on exposure to air. That by such admixtures no service is done to the public is evident, and it is only to be regretted that the German Pharmacopœia should require this reaction.

THE CHEQUE BANK (LIMITED).

A VERY excellently-conceived plan to develop in a desirable direction the advantages of bankers' cheques has just been propounded, and put in operation by a company with the title quoted at the head of this notice. The objects of the Cheque Bank are to provide a means whereby anybody with cash of any small amount, can avail himself or herself of the use of a cheque-book, and to provide furthermore for the absolute security of such cheques. The plan is to be that any person can place money (one pound and upwards) in any London or country bank to the credit of the Cheque Bank, and receive in return a cheque-book which will contain cheques limited to a certain amount each, none being higher than £10, and ranging down to £1. Such cheques are absolutely safe, because the drawer must have deposited his money before drawing the cheque. For small payments, and remittances through the post, this system will, without doubt, soon become very popular. It is quite obvious that in the latter case it has many advantages over the system of transmitting money by post-office orders, and the cost of a £10 cheque will be a penny, while a £10 post-office order costs 1s. The trustees of this bank are Messrs. Dalglish, M.P., Ellison, M.P., Samuel Morley, M.P., and W. H. Smith, M.P. These and other first-class names on the list of directors are abundant guarantee of the *bonâ fide* character of the undertaking. Further particulars will be found in our advertising pages (page 5.) A well-written pamphlet (price 2d.) also gives very full particulars of the scheme.

NEXT month (July 15) will be our semi-annual distribution to the trade. We are prepared to circulate ten thousand lists to chemists and druggists at home and abroad on that occasion. Please communicate with the publisher.

MR. G. H. WRIGHT, of the Borough, persists in maintaining that he is not Mr. W. V. Wright, of Southwark. At least this is what we gather from the advertisement pages and the correspondence columns of the *Pharmaceutical Journal*. We are not disposed to enter into a controversy on the point, and if Mr. G. H. Wright thinks proper to spend 12s. 6d. a week in order to state his view of the case, we see no reason to hinder him. But it is only fair to remark that if Mr. W. V. Wright should at any time contradict Mr. G. H. Wright on this momentous question, the world will be puzzled, for both will be Wright, and it will be right to write to Mr. W. V. Wright, U R right, and to Mr. G. H. Wright, R U right?

HOMŒOPATHY.—A popular doctor in Oswego gave a prescription with directions to take a teaspoonful every three years. The patient recovered.

INTELLIGENCE AND PATENTS.—Massachusetts is noted for two things, intelligence and patent medicines. A local paper tells a story of a family having drank 73 dozen bottles of balsam.



AUSTRIA.

VIENNA, May 31, 1873.

THE Department for Public Worship and Education has placed at the disposal of the Society of Apothecaries of Austria a subvention of seven thousand florins in aid of the expenses incurred by that Society in 1872 for appliances and alterations of buildings, so as to render them more practical. In a very flattering letter, the Minister of Public Worship and Education, Herr Stremayr, expresses his willingness also to aid materially the endeavours of the society in future.

The 1st of June witnessed the opening of the exhibition of educational appliances on the north side of the Industrial Hall, between the Hungarian and Russian exhibitions. This exhibition was initiated by the department I have already referred to—namely, the Ministry for Public Worship and Education. The courtyard, covering an area of 1,200 square metres, just a little below the level of the main building, is divided into five galleries by lofty wooden pillars, which support the light roof. The imposing centre gallery, measuring some fourteen metres in height, considerably overtops the aisles on each side, of equal width, but only five metres high, and is divided in its length into three almost equal parts, representing our system of public, middle, and university schools.

In the space allotted to the latter, the Pharmaceutical School of the Society of Apothecaries of Austria has obtained leave to exhibit collections and apparatus for instruction. Besides the large collection of cinchonaceæ, a present of Mr. Duvernois, in Stuttgart, enriched by gifts from Howard, Pfantzer's successor, Jobst, Leybold, and others—a model collection, indeed, and widely known through the work of Professor Vogel, of Prague—the exhibited part of the collections comprises 1,200 kinds of wood, a collection which obtained the large silver medal in 1866; a smaller collection of woods from Tahiti, Japan, Chili, etc.; and a splendid show of different opium, sarsaparilla, and easter plants, etc. On the two side stands are some samples of sponge which attract universal attention and admiration, and works by pupils of the chemical laboratory, amongst which may be found many choice and valuable preparations, such as rubidium, calcium in various combinations, rhodium and iridium preparations, etc. In this department we also find Hyrtl's world-famed anatomical preparations, a display of the various kinds of stone found in the Austrian dominions by the Imperial Geological Institution, and the collections of the Anthropological Society, containing Dr. Wankel's famous objects.

The Society of Pharmacæutists (Wiener Pharmaceuten Verein) held its general meeting on the 9th May, in which, after reading the report, a very gratifying improvement, and a considerable increase of prosperity was shown as against the previous year. The President delivered a lecture on "Neptunism and Vulcanism," which was listened to with marked attention, and subsequently the election of officers was proceeded with. Herr Franz Lang, was elected President; Herr Axmann, Secretary; and Herr Raimund Postl, Treasurer. The remainder of the evening was spent in conversation.

The Society of Pharmacæutists "Progressus" in Grazstyria held its general meeting on May 24th, merely for the purpose of electing the committee. Herr Wartsch, Mag. Pharm., was elected President. The meeting was numerously attended.

In No. 8, of the reports of the Deutsche Chemische Gesellschaft (Berlin), will be found the addresses of those members of the *Chemisch-Physikalische Verein*, of Vienna, who are willing to give upon request, either by letter or verbally,

information and assistance to fellow-professors of chemistry, pharmacy and physics visiting the Exhibition. This list is published by the authority of the Vienna Society.

STEARIN MANUFACTURES IN THE EXHIBITION.

The principal representatives of this branch of Austrian industry have spared neither pains nor expense to show their manufactures to the visitors of the Vienna Exhibition in the most elegant and imposing manner in the interior of the Rotunda. Especially striking is the giant bust of "De Milly," the founder of the stearin candle manufacture, to whom Austria in particular is indebted for the flourishing state of this branch of industry. Like all the other stearin eastings, some of which are really artistically executed, this giant bust yet deserves special notice on account of the difficulties that have to be surmounted in casting stearine. The great expansibility of stearine in a high temperature is one of the most troublesome obstacles. After casting, while cooling, stearine contracts considerably, and a number of cracks all over the surface is the consequence. This evil may be partially remedied by making the figures hollow and as in the case of stearin candles by applying the stearic acid in a half solidified state, which to a great degree, diminishes subsequent contraction. The first stearin works were built by De Milly, in a suburb of Vienna, called Wieden, some thirty years ago, but in 1858 they had to be removed to Liesing, a distance of about five miles from Vienna, in consequence of the complaints made by the inhabitants living in the neighbourhood of the works. They are still in Liesing, having meanwhile passed into the possession of Herr Sarg, and situated in close proximity to the railroad, they attract by their extensiveness the attention of all travellers. As is well known, stearic acid is obtained from the fat of animals of the sheep and ox kinds. These fats are glycerides or alcohols of triatomic glycerine. According to a now obsolete practice, sebæic acid was obtained by impregnating lime with the pure fat, the substance thus produced being subjected to sulphuric acid, and the cake of sebæic acid repeatedly pressed between hot plates, by which process all softer, and for the candle manufacture less suitable ingredients were removed. The residue is a mixture of palmitic and stearic acid which is commonly called stearine. Candles made in this manner are no doubt the best, but also the most expensive, and this has caused in late years the introduction of other methods. There are more particularly two systems upon which this manufacture is now carried on. The first to a certain degree is merely a modification of the old lime process, except that smaller quantities of lime are used under application of highly condensed steam. The other method, chiefly practised in France, the Netherlands, etc., is based upon dissolving the tallow with concentrated sulphuric acid, and subsequent distilling of the sebæic acids, which has given rise to this being known as the distilling method. Samples of this method, very nicely finished are shown in the Exhibition by the "Apollo Kerzeu Fabrik," in Schieden, Holland, whose display will interest every one connected with this branch of manufacture. What great progress this industry, founded by De Milly, has made in Austria, is shown by the large number of extensive works represented at the Exhibition. The most prominent are the establishments of Sarg, Himmelbauer, Hoffmann, in Graz (whose miniature temple in stearine may be called one of the finest exhibits in the Rotunda), Wagemann, Meblein, Semmer and Trenzel in Brünn, and lastly, although not least, the large "Apollo Kerzeu Fabrik," in Wien. Not less fine specimens are exhibited by the "Florakerzen Fabrik," in Pesth. The quantities of raw material used in these works are very considerable, Sarg's establishment alone requiring annually above 60,000 ewts. tallow. The largest proportion of these materials is imported from Russia.

ANTIBILIOUS.—The *Louisville Courier Journal* says: "Hall's *Journal of Health* says that the human system needs acids to promote the secretion of bile, and therefore pickles are healthful to those who crave them. Senator Conkling, then, must be the healthiest man in the country, for he is always in a pickle, and is as sour and bilious as a gulf stream of bile running through an ocean of vinegar."

THE GERMAN PARLIAMENT AND THE REFORM OF LAWS REGULATING THE TRADE OF APOTHECARIES.

BERLIN, June 3, 1873.

VERY important debates from a pharmaceutical point of view took place in the German Parliament on May 23rd. The question was raised by petitions both for and against the recent decision of the Imperial Chancellery to proceed with the reform of laws relating to the dispensing of drugs and medicines, a question regarded by Parliament as of great importance, on the basis of free trade.

Members, however, were not present in such large numbers as usual, and this is accounted for by the fact that on the previous day they had been inspecting the German fleet in Wilhelmshaven, and had been particularly busy in attending to their own corporeal provisioning. No wonder, therefore, that a large number had to take breathing time in Bremen to recover from these exertions.

Preceding the pharmaceutical matters, a military question had been discussed, and no sooner was this concluded and the word "apothecary" heard, than Field-Marshal Moltke, who as member of Parliament had attended the earlier debate, left the house; the Moltke of the Bourse, however, Dr. Lasker, remained in his place, and even the Minister of Public Worship and Education, Dr. Falk, made his appearance, and stopped to the end of the animated proceedings.

In addition to the opinion of several Professors of national economy and statistics, who are opposed to freeing the drug-trade from all legal restrictions, and consequently also opposed to the Government scheme, the Deputy bringing up the report read a letter from Deputy Virehow, who wrote strongly against the introduction of free trade principles in this branch of commerce, and recommended the transformation of apothecaries' shops into municipal establishments. The reporting member of the Committee in the end moved to request the Imperial Chancellery to produce *without delay* a new law for the regulation of apothecaries' shops.

In the course of the debate which followed, other countries were referred to, in which some of the most intelligent German apothecaries make a fortune because in their fatherland they have no chance of prospering under the "oppressive system." But, strange to say, England was not named. Yet there are in London comparatively more German apothecaries and more German apothecaries' assistants than in any other European city. In Rome, for instance, there is one so-called German chemist's shop, but nobody in the shop understands German. Paris, also has two German apotheken, the proprietors of which, and often also their assistants, understand German; it is, however, doubtful whether at the present time, after the war, they are still existing. On the other hand, anybody with the slightest personal knowledge of foreign countries will allow that English chemists are found everywhere—English, not merely by name, like the above-named German establishments, but English, because at least one of the assistants speaks the language, and especially because everything official contained in the British Pharmacopœia may be found there.

There are three English chemists in Rome; Naples has one; Florence, with the only real German apotheker in Italy, has four; and Paris numbers them by tens. Can the same be said of English chemists that the Deputy stated with regard to their German brethren? Is it the fact that English traditions are better maintained abroad than at home? Or is there an "oppressive system" there also? And yet Germany is to have one assimilated to that of England! It is simply a matter of speculation on the part of chemists abroad to engage English-speaking assistants, and to keep English preparations; by so doing they insure an increased business. The patronage and kindly feeling towards countrymen shown by travelling Englishmen, and especially the fact that medicines, of which, as a rule, they know all ingredients, are considered by them almost necessities—these combined foster the growth of English chemists' establishments abroad, but not by any means oppressive laws at home.

To the exclusion of all the rest of Germany, it is only on the Rhine, and perchance in Berlin, that chemists' shops

are to be found that keep a stock of essentially English preparations, and this is explained by the fact that the German and English schools of pharmacy have many things in common. It is different in the East. Cairo, as well as Beyrout, have their specific German apotheken, Alexandria and Cairo their specific English chemists; but, as a rule, the English chemist's shop in the East is quite as much French or German.

The general opinion in Parliament is decidedly favourable to the necessity of an alteration of the laws, but the majority is as yet decidedly opposed to complete freedom, but would prefer to grant an increase in the number of licences.

Every apothecary's shop in Germany had, as is well known, until the beginning of this century, a privilege, or charter, to the effect that in a specified district that one establishment only should exist. Later on, this was considerably modified by the granting of licences. These licences conferred the same rights as the old privileges, with this exception, that they are personal, unsaleable, and revert to the State. Both were subsequently looked upon as of equal value, but if free trade should be introduced, it seems to be taken for settled that the privileged shops will be indemnified, while those existing under licence will receive no compensation.

It is now proposed to introduce the English system by which any apothecary, duly qualified after examination by the authorities acting on behalf of the State, may open an establishment wherever he pleases, subject to Government control over all drugs and preparations kept in stock.

The proprietors of apotheken expressed themselves in their petitions strongly against the opening of an unlimited number of establishments, but at the same time they asked for State control; the assistants urged very persuasively their claims for liberty to open shops; both agreed as to the necessity of an increased number of licences.

With a population of nearly a million, Berlin has only fifty apotheken, and there are several towns in Prussia with above 10,000 inhabitants, which have not one. Steps have been taken in Berlin to grant a few additional licences—six in number—but the whole matter has not progressed beyond the preliminaries, and yet many months have been spent to arrive at even that stage. The city has grown immensely during the last two years as regards inhabitants, and also in extension of boundaries, but only one new apotheker has been opened for many years.

Government has been upbraided with this indifference and delay by one Deputy, who said, "By adjournments at convenience, they had ultimately allowed the matter to rest altogether."

Particularly noticeable was the fact that during this debate, a Deputy friendly disposed towards Government, again moved that ominous adjournment. One member only spoke for free trade, and three against, while all agreed as to the great urgency of reform, and, at last, almost unanimously, Government was requested to present a new law to regulate the trade in drugs.

The speech of one Deputy who, in his mind's eye already beheld a time when apothecaries or their shops will be wanted no more, was a curiosity worth mention. For many years past the representatives of the people have demanded this reform in vain. The Prussian, as well as the North German Parliament, demanded it, and now the whole of Germany is clamouring. But nothing is stirring; the preliminary measures respecting this eminently difficult problem, this exceptional branch of trade, are *not yet completed*.

'PON MY DAVY!—The conduct of the ship-owners with regard to Mr. Plimsoll's measure for the protection of the lives of our seamen has at last disgusted even Neptune himself. We see announced a new invention, the "Brough" Patent Life Float, which is manufactured only by the patentees—David Jones and Co! Think of Davey Jones preventing people from going to his locker!—*Fun*.

THE PROPER QUOTATIONS.—"I should like," said a French medical charlatan, "to place over the door of my surgery an inscription, either in Latin or Greek, borrowed from one of the great authors." "Give Italian the preference," remarked one of his patients; "nothing can equal that verse of Dante's 'Abandon hope, all ye who enter here.'"

AUSTRALIA.

THE Pharmaceutical Society at Victoria is hoping soon to get a Pharmacy Act somewhat on the British model passed through their Parliament. We have received from Melbourne a copy of the Report, which speaks for itself. It will be noticed that the President suggested the CHEMIST AND DRUGGIST, of London, as the organ of the Society *pro tem.*, a position which we shall accept with pleasure. Our distant friends are destined some day to become a great empire, and they will save themselves a vast deal of trouble if they can get a Pharmacy Act while they are comparatively few, instead of waiting until there is a multitude of fancies to meet.

THE FIFTEENTH ANNUAL REPORT OF THE PROCEEDINGS OF THE COUNCIL OF THE PHARMACEUTICAL SOCIETY OF VICTORIA, MARCH, 1873.

GENTLEMEN,—Your Council have much pleasure in again meeting you to report their proceedings during the past year.

The objects of the Society being the advancement of pharmacy, the security to the medical profession and to the public for the safe and efficient administration of medicines, the promoting of union among and also for protecting the general interests of chemists and druggists, your Council have been unceasing in their efforts for the attainment of these.

It will be in the recollection of members that in last year's report it was stated that a "Pharmacy Bill" had been prepared by your Council, and that conferences and correspondence with the Medical Society had made it alike satisfactory to both Societies; also that the Bill so prepared had been presented to the then Attorney-General, who promised that it should receive his careful consideration. A change of Government occurring since then, your Council last July wrote to the present Attorney-General, inquiring whether the "Pharmacy Bill" would be introduced during that session of Parliament, and received the following reply:—"That the Attorney-General will give the matter his attention at the earliest moment on which the state of public business will permit." The last busy session having terminated, your Council count fully on its early introduction during the forthcoming one.

In consequence of the Pharmacy Bill having been delayed in its progress the Society's operations have not been extended. Your Council have been desirous to commence the republishing of the "Transactions," but not knowing to what extent the funds would be required for a private bill, should the Government refuse to take up this subject of legislation upon public grounds, deem it prudent to defer this matter. It has been suggested by your President that for the time being a copy of the English CHEMIST AND DRUGGIST should be forwarded monthly gratuitously to each member, having an addenda of your Society's proceedings, with other matters of interest. Should this meet with a favourable response from members it will be carried out forthwith. During the past year the roll of members and associates has been extended; your Council regret that they have been compelled to refuse some of the applications, but, exercising care in the granting of the Society's diploma, they hope it will give some guarantee to the profession and to the public of competency on the part of those who hold it. The names of members and associates are hereto appended.

The subject of early closing having been brought before your Council during the year, both by members and non-members, they took the initiative and called two meetings of chemists and druggists. The attendance was not so great as was expected, but those present entered into its consideration with due regard to the employers, *employés*, and the demands of the public. It was shown that the special peculiarities of a chemist's business together with the demands upon it being different in each district placed the subject of final closing at a given hour each day out of the question; but your Council earnestly advises the adoption of a liberal consideration by employers to the employed, and also by the public to those engaged in the calling of a chemist and druggist.

The second *conversazione* of the Society was again held at the President's residence. Some 200 members and friends attended; papers of interest were read; addresses on scientific subjects delivered, having special reference to che-

mistry and pharmacy; numerous chemical and pharmaceutical preparations exhibited, together with chemical apparatus and microscope. Your Council would here record its thanks to the President and to all the gentlemen who so generously took part.

At the last annual meeting a suggestion was made to hold quarterly meetings of the Society—one such was held, at which a paper was read and other matters of interest considered, but few attended.

Your Council have held during the past year sixteen council meetings, and several sub-committee meetings.

Four members of council retire by rotation—Messrs. Bosisto, Wragge, Ford, and Irvine, but are eligible for re-election. Six gentlemen have been nominated for the vacant seats, and to-night you will be called upon to elect from them the number required; also to elect two auditors for the ensuing year.

The Hon. Treasurer's account for the past year, duly audited, is appended.

The members of Council retaining seats are Messrs. Johnson, Lewis, Francis, Jones, Blackett, Hill, Aitken and Green.

THE HON. TREASURER IN ACCOUNT WITH THE PHARMACEUTICAL SOCIETY OF VICTORIA.

FOR YEAR ENDING DECEMBER 31, 1872.

Cr.			
To Balance, last account..	..	..	£78 4 0
Members' Subscriptions ..	..	..	67 4 0
" Entrance Fees ..	..	..	11 11 0
" Registration Fees ..	..	..	24 5 0
Associates' Subscriptions ..	..	..	6 6 0
" Entrance Fees ..	..	..	2 5 0
" Registration Fees ..	..	..	1 5 0
Apprentices' ..	..	..	0 5 0
			£191 3 5

Dr.			
By Rent ..	..	..	2 11 0
Diploma Cases ..	..	..	1 10 0
Associates' Certificates ..	..	..	6 15 0
Stationery ..	..	..	3 3 0
Printing ..	..	..	6 10 0
Engrossing two copies "Pharmacy Bill," &c. ..	..	..	6 6 0
Advertising ..	..	..	2 12 0
Postage, &c., Hon. Treasurer ..	..	..	1 3 10
" Hon. Secretary ..	..	..	3 0 0
Expenses at <i>Conversazione</i> ..	..	..	15 5 4
Balance at Colonial Bank ..	..	..	136 3 1
" in hand of Hon. Treasurer ..	..	..	3 4 2
			£191 3 5

Examined and found correct.—GEORGE KINGSLAND, } Auditors.
HENRY J. LONG.
GEORGE LEWIS, Hon. Treasurer.

At a meeting held on March 21st, Mr. W. Johnson, President, in the chair, the foregoing report was presented. Some discussion took place in respect of the President's suggestion to supply the CHEMIST AND DRUGGIST to all members. In view of the prospect of expenses connected with the passing of a Pharmacy Bill through the legislature, it was not thought desirable to adopt that suggestion at present.

Provincial Reports.

DUBLIN.

CHEMISTS' AND DRUGGISTS' SOCIETY OF IRELAND.

THE monthly meeting of the above Society, was held on Monday evening, June 2nd, at 12, Grafton-street. Mr. J. Goodwin was moved to the chair. Being Whit Monday, the meeting was not numerously attended. The routine business was gone through, and the following gentlemen were admitted to memberships:—Mr. S. Conolly, Athy; Mr. R. A. Jones, Warrenpoint; Mr. E. Hunter, Castleblaney; Mr. H. J. Deever, Castlebar. The following were elected associates:—Messrs. Norman, Woodruffe, C. F. Weir, J. Mills, etc. The next meeting of the Society will, in accord-

ance with the following rule, be for re-election of officers and committee:—

"VII.—That on the first meeting of the Society all the officers and committee shall be elected from amongst the first members of the Society. All the officers and committee so elected shall remain in office for six months from the first such meeting, when a general meeting of all the members of the Society shall take place—seven days' previous notice by post being given—at which meeting an amended and more comprehensive set of rules shall (if necessary) be submitted for the approval of the meeting, and be then and there confirmed."

EDINBURGH.

THE annual meeting of the North British branch of the Pharmaceutical Society was held at Edinburgh on May 12. Mr. H. C. Baildon, the retiring President, made a short valedictory speech. The annual Report was next presented. From this it appeared that the Board of Examiners in Scotland had, during the past year examined Preliminary, 175; Major, 13; Minor, 54; Modified, 24; in all 264. The failures roughly were 41 per cent. Following this occurred a remarkable paragraph, which we reprint:—

Great as has been the extent of failure in the past, it is much feared that a recent change carried out by the Board in London, will very much increase the percentage for the future. It may be frankly stated that the examiners in Scotland do not concur in some of these alterations, and are very desirous that the old condition of things in respect to partial failures should be at once restored. They feel strongly on this point, sharing as they do the fear—if not the conviction—that if the change referred to be continued, it will so militate against parties entering the business, that the supply, both of apprentices and assistants, may yet be seriously interfered with if the new system be adhered to. Some correspondence has already taken place between the two Boards, London and Edinburgh, which the Council hope may result in some satisfactory arrangement being made.

The rest of the Report referred to local matters.

Afterwards Mr. Young was elected President for the ensuing year, and Mr. Gilmore re-elected Vice-President. Mr. Mackay was also re-appointed honorary Secretary.

The following gentlemen retired by ballot from the Council, but were eligible for re-election:—Messrs. Fairgrieve, Noble, Napier, Heron, Davison (Glasgow), H. C. Baildon, J. Aitken, and Fairlie (Glasgow).

The following having been nominated were declared elected, other five who had been also placed in nomination having retired:—Messrs. Kemp (Portobello), Buchanan, W. Tait (of Duncan, Flockhart, and Co), Fairlie (Glasgow), Davison (Glasgow), J. Aitken, Heron, and Baildon.

After several votes of thanks the meeting was concluded.

GLASGOW.

WE have received a copy of the second edition of the Glasgow chemists' price-list, which our readers are aware is now the scale of charges adopted by the majority of chemists of Glasgow and Greenock. It includes a scale of dispensing charges from which, however, it admits variations. But the rule is, that each dispenser should mark the prescription with the price he has charged, using the words "mel boracis" as the private code. The scheme is obviously very open to danger, but as far as we know, it has worked well up to the present. If the Glasgow chemists can keep it going when the novelty has worn off they will deserve great credit, and will have set an admirable example to the trade elsewhere.

LIVERPOOL.

THE CIVIL SERVICE CO-OPERATIVE STORES.

THE Co-operative Society which promised such magnificent prospects for the inhabitants of Liverpool and the neighbourhood, took Compton House, and threatened to swamp all the retail trade of our great city, has nearly reached the conclusion of chapter I., if not of the whole book. A part of the local press has battled vigorously with the whole concern, and has probably done good service thereby, not

only to other tradesmen, but likewise to the shareholders themselves. Finding they were running deeply in debt, nominal shareholders, who had only intended to be customers, became alarmed; and what with their fears and the troublesome claims of importunate creditors, the Association has lately had a stormy time of it. Driven to its wits' ends, it has at last appealed to the Court of Chancery to be wound up. Another petition for a compulsory winding-up order is hanging over the Company, but the voluntary one will be heard first. The hearing of the case is fixed for June 17th. Two London Companies have made proposals to take over the business. One is the "Foreign Service Supply Company (Limited)"; the other is the "Mutual London and Provincial Co-operative Society (Limited)." Whatever may be the credentials of these companies, it is certain that they have not as yet achieved a very world-wide renown. The "Mutual" offers to pay for the goodwill and fixtures the sum of £22,000; £10,000 in cash on taking possession, and £12,000 in paid-up shares. It is also to take over the stock at a valuation, and pay for it in nine monthly instalments. The stock is said to be worth between £30,000 and £50,000. The duty of an equity judge in such circumstances as the present is difficult, from its double character. He has to take care, in the first place, of the creditors, but, in the second, of the shareholders. If the Vice-Chancellor cannot convince himself of the prudence of the agreement, he will, in all probability, reject the petition of the Company, and make the ordinary order for compulsory liquidation on the other petition. The immediate consequence is that the transaction of business at the premises of the Association is temporarily brought to an end.

SUGGESTIONS FOR THE READING OF LATIN PRESCRIPTIONS.

Intended for the use of those whose early education has been neglected or forgotten.

By JOSEPH INCE.

[I have been assisted in the compilation of this paper by Messrs. G. F. SCHACHT, F. BADEN-BENGER, and FRANCIS BELL.]

THESE directions are not meant to supplant in any way, even the slightest, that one true method of acquirement, sound scholastic training, and a well-grounded knowledge of the rules of grammar. But, to appease the wrath of Achilles, which comes to us in the shape of a wholesome dread of cramming, I am bound to state that no amount of classical education will prove sufficient in mastering the purely technical details involved in deciphering medical formulæ; nor do I shrink from a popular task, knowing from experience that whilst the mass of our students are able to read prescriptions in such a manner as to render them faithful and accurate dispensers, yet there are few amongst the number competent to give the correct terminations, or to explain the construction of recipes offered to their inspection. Take any convenient illustrations, such as those following, but by no means slavishly adopt these: rather strike out an independent course, and treat other selected specimens in a similar manner.

For the special purpose of giving the greatest variety in the smallest space, no order has been adopted in the selection; but the student might perhaps with advantage arrange his work under such distinct headings as Misturæ, Pilulæ, Lotiones, Gargarismata, Emplastra, Confectiones, Guttæ, Applicationes, or the like.

I.

R Sarsparillæ Jamaicensis radicis
Concisæ et contusæ, ʒijss.
Aquæ destillatæ, ʒxxv.

Misce et maccra per horas xij., deinde coque leni calore ad ʒxv. et cola.

Adde liquori colato
Ammoniaë sesquicarbonatis, gr. xvij.
Tinct. cinchenæ compos., ʒss.
Ext. glycyrrhizæ, ʒj.

Fiat mistura ejus sumat partem quartam ter die.

Junii 1, 1850. SIR B. C. BRODIE Bart.

II.

℞ Fellis bovin. purif., gr. xv.
Pil. coloc. et hyoseyam., gr. xij.
Podophil. resinæ, gr. j.

Misce intime et fiant pil. vj. Sig. dose one.

DR. WANE.

III.

℞ Magnes. carb. levis, ʒij.
Aquæ ad ʒviij.

M. fiat mist—capiat coch. magn. ij, 4tis horis.

℞ Hydr. c. cretâ, gr. ij.
P. ipecac. comp., gr. viij.
Mucilaginis q.s.

M ft. pil. ij. horâ somni sumend.

Sept. 21, 1871.

E. S.

IV.

℞ Ext. opii, gr. ʒ partes
Pil. hydrargyri, gr. iv.
Ext. cascarillæ, gr. iij.

Contunde simul et divide in pil. no duas. Sumantur pro
dose hora ix^{na} vesperi hac nocte atque cras eadem hora.
Mitte N^o iv.

℞ Potassæ carbonatis, ʒj.
Aquæ cinnam.
Aq. fontanæ, āā ʒiij.
Tinct. aurantii, ʒj.
Syrupi, ʒss.

M. sigr. cochl. magna ij. cum succi limonis cochl. parvulo
uno, ter die.

Dec. 2, 1812.

J. CURRIE.

V.

℞ Potass. iodid., ʒi.
Aq. destil., ʒiv.

M. ft. Garg. sæpe in die appl.

℞ Veratriæ, gr. viij.
Ol. Oliv., gtt. x.
Adipis, ʒiij.

M. ft. ung. quotidie appl.

Dec. 22, 1840.

A. T.

VI.

℞ Hydrarg. submur., ʒss.
Sacc. saturn, ʒj.

Unq. ceræ, ʒss. M. ft. ung.

℞ Hydrarg. subm.
Sulph. aur. ant., āā ʒj.
Opii purif. pulv., gr. v.
Cons. cynosb., q.s. F. pil. No. xij.

Capiat j. omn noct.

Feby 3, 1826.

R. B.

[R. Bethel, father of Lord Westbury.]

VII.

℞ Alum, ʒss.
Aq. rosæ, ʒvj.

F. Lotio.

℞ Argent. nitr., gr. ij.
Aquæ destill., ʒj.

F. Guttæ pro oculo.

℞ Sodæ carb.

P. rhei, āā gr. v.

F. pulv. quotidie sum. vj.

Empl. lyttæ temp et pone aurem dextr. imponend.

Sept. 9, 1822.

VIII.

℞ Pulv. scam. cum cal., gr. xij.

Ft. pulv. omni mane ad tres vices repetendus.

Mitte pulv. iij.

℞ Fer. carbon., gr. j.
Calumb. pulv., gr. iij.

Pulv. aromati., gr. ss.

M. ft. pulv. omni mane absente febre repetendus.

Mitte No. vj.

Sept. 14, 1812.

J. HAUGHTON.

IX.

℞ Pil. hydrarg., ʒss.

— ex aloe cum myrrh. ʒj.

M. et divide in pil. xxx. Sumat ij. sing. noct. h. s.

Admov parti affect empl. ex hydrarg.

SIR DAVID DUNDAS,

Sergt. Surgeon to George III.

X.

℞ Pulp. cassiæ fistulæ, ʒij.

Cap. g. castanæ singulis noctibus horâ quietis, augendo
vel imminendo quantitatem pro modo operandi. Persistat in
usu cassiæ donec febricula prorsus evanerit.

℞ Elect. lenitiv, ʒij.

Lact. sulphuris, ʒiij.

Syr. ros., q.s.

M. f. molle electuarium, ejus cap. quantitatem castanæ
omni nocte cubitum itura, donec prorsus convalescit.

DR. ALEXANDER ABERDOUR. 1809.

XI.

℞ Liq. ammon. a., ʒiij.

Sp. ether. nitros, ʒiv.

Vini. ant. tart., ʒij.

Aq. camph. ad ʒviij.

M. cap. ʒj. q.q. 2da hora.

℞ Quiniæ sulph., ʒj.

Acid sulph. a., ʒss.

Tr. chloroform. co., ʒij.

Syrupi aurant., ʒvj.

Aquæ ad ʒviij. M. cap. ʒj. q.q. 4ta hora.

June 20, 1872.

E. H. RUDDERFORTH.

XII.

℞ Pulv. ammoniaë hydrochloratis, ʒj.

Aq. fontanæ, ʒviij.

Aq. rosæ ad ʒxij.

M. ft. lotio ut dicta cruri et pedi applicand.

29th April, 1861.

E. L.

XIII.

℞ Liniment. ammon.

Liniment. chloriformi

Liniment. opii, āā ʒiv.

Ft. linim. ejus infricetur paucill bis terve quotidie sterno
et parti thoracis dolenti.

Feb. 14, 1870.

C. J. Y.

R Pulv. rhei turc. optissim, gr. iij.

Saponis, gr. j.

Zingib., gr. j.

M. ft. pil. j., dosis j. vel ij. anti prand sumend vel ant. somnum.

Jan. 21, 1865.

G. W. R. P.

Mitte xxxvi.

XV.

R Ext. colocynth comp., gr. vj.

Ext. hyosey., gr. iij.

Fiant pilulæ duæ, post horas quatuor nisi alvus prius solutus fuerit cap.

R. Spiritus ætheris sulphurici comp., fl. ʒj.

Mist. amygdalarum, fl. ʒijss.

Syrupus rhœados, fl. ʒss.

M. dimidium horis quartis adhibendum.

Maii 27, 1834.

F. H. B.

XVI.

Mitte hirud. No. vj.

Applic. later. dolent emp. vessicator hora vesper.

R Submur. hydrarg., gr. iij.

Pulv. antimon., gr. iv.

Confec. rosæ, gr. jss.

M. ft. pil. h.s.s.

R Mag. sulph., ʒss.

Aquæ, ʒj. ʒij.

Tr. card. co., ʒj.

M. ft. haust. Aper cras primo mane, s.d.

XVII.

R Sod. bicarb., ʒij.

Ammon. carb., ʒij.

Potass. nit., ʒss.

Syr. aurant., ʒss.

Ac. hydrocyan., Sch. xij.

Aquæ ad ʒviiij.

M. cap. ʒjss. ter in die, ʒj., pulv. seq. m. stat. efferves.

R Ac. tart., ʒj.

Mitte chart, vj.

Oct. 15, 1870.

H. P.

XVIII.

R Tr. gent. comp., ʒj.

Liq. tarax., ʒijss.

Sp. ammon. co., ʒss.

M. sum. coch. med. bis die ex aq. cyath.

R Pil. hydrarg.

Hyd. chlorid. āā gr. jss.

Ext. col. co., gr. iij.

Ol. menth. pip., m j.

M. ft. pil. p. r. n. s.

Mitte vi.

Jan. 14, 1858.

XIX.

R Ol. tig. croton., gr. iv.

Pil. styrac co., gr. iv.

In pil. iv. divid. hab. i. iv. quæque hor. donec alv. sol. sit.

J. T.

XX.

R Pot. bicarb., ʒj.

Tr. gent. co., ʒjss.

Sp. chlorof., ʒj.

Liq. tarax., ʒij.

Aquæ ad ʒviiij.

M. sum. coch. amp. bis die c. ac cit. ʒj. in aq. cyath.

Mitte ac. ch. xvj.

R Pil. hydrarg.

Pil. galb. co. āā gr. iij.

Ext. al. Barb., gr. jss.

M. ft. pil. ij. p.r.n. Sd.

Mitte vj.

XXI.

R Ammon. sesquicarb. ʒij.

Sod. sesqcarb., ʒij.

Pot. iodid., ʒss.

Vin. colch., ʒij.

Tr. aurant., ʒij.

Aq. pur. ad ʒiv.

M. cap. coch. j. amp. ter in die ex aq. et coch. amp. suc lim. rec.

R Quin. disulph., gr. iij.

Pil. hydrarg., gr. iij.

Ext. col. co., gr. iv.

M. ft. pil. ij, om n. s.

Mitte iv.

XXII.

R Sodæ bicarb., ʒss.

Pulv. tragac. comp., ʒiv.

Aquæ cinnam., ʒvj.

Tinct. opii, min. xx.

M. ft. mistur. sumat quart. part statim et repet in horis quatuor postea, si opus sit.

July 10.

XXIII.

R Morph. acet., gr. ʒ

Pulv. colch., gr. iij.

Fiat pilula 4tis horis sumenda, mitte vi. Fol. argent. involv.

R Potass. bicarb., ʒij.

Syr. aurantii, ʒij.

Tinct. ejusdem, ʒij.

Aquæ ad ʒvj.

Tinct. card. co., ʒij.

Cap. sextam partem 3tis horis cum cochl. amplo succi limonum.

March 11, 1868.

F. B.

XXIV.

R Hydrargyri subchloridi, gr. x.

Ext. opii pur., gr. j.

M. divid. in pilul ij. capt j. 1st 2nd quæque hora rept.

R Infusi sennæ co. ad ʒij.

Magnes. sulphatis, ʒiv.

Tinct. sennæ co., ʒij.

Sp. ammon. co., ʒj.

Tr. zingib., ʒss.

Manuæ opt. ʒij.

Tr. card. co., ʒij.

M. ft. mistura. capt. ʒ horas ij. post pilul. et altera horas ij. rept. si opus sit.

June 14, 1869.

[Write out correctly and explain the construction of the last twelve.]

We have here twenty-four prescriptions, let us clearly understand our task—we want to thoroughly master the meaning, grammatical construction, and technical details of these formulæ. It is obvious that ill-directed reading will both be wearisome and unprofitable. Let us attack the groundwork, however discouraging and dry the effort; let us not guess, but know the reason for the contracted signs before us, what the words are themselves, and to what rules they are subject. Elegance of translation may follow in due course, but the foundation of our learning must be well laid. This is a rude path, but the surest and the most speedy, and the timid aspirant should draw comfort from the fact that the plan proposed has beyond measure proved successful. In order to economise both space and time, I have worked out twelve recipes. Twelve have been left untouched in order that the student may try his own hand on their arrangement. The whole two dozen presented are simply the last set that have come to hand. Personal work is indispensable. Should any reader adopt *my* formulæ, or use *my* tables without constructing others for himself, for him these remarks are written in vain.

A glance demonstrates that there are many Substantives, Verbs, and Adjectives, some Pronouns and Adverbs in these illustrations. Their exact significance and nature must be worked out by the aid of a Latin grammar and dictionary. The Public School Latin Primer will do for the first; the abridged edition of Smith's Latin Dictionary for the second. Commencing with the substantives we get our first tabulated form.

TABULA PRIMA. SUBSTANTIVES.

M., F., N., Masculine, Feminine, Neuter.

LIST.	Uncontracted Form.	Case.	Gender.	Dec.	Nominative.
Acid.	Acidi	Gen.	N.	2	Acidum
Adipis	"	Gen.	com	3	Adeps
Aloe	"	Ahl.	F.	3	Aloe (gen. Aloes)
Alum.	Aluminis	Gen.	N.	3	Alumeu
Ammon. }	Ammonie	Gen.	F.	1	Ammonia
Ant.	Antimonii	Gen.	N.	2	Antimonium
Aquæ	"	Gen.	F.	1	Aqua
Argent.	Argenti	Gen.	N.	2	Argentum
Aurant.	"	Gen.	N.	2	Aurantium
Aurem	"	Accus.	F.	3	Auris
Cal.	Calomelas	ritteu v	ariouly	Indeclinable	
Calore.	"	Abl.	M.	3	Calor
Calumb.	Calumbæ	Gen.	F.	1	Calumba
Camph.	Camphoræ	Gen.	F.	1	Camphora
Carb.	Carbonatis	Gen.	F.	3	Carbonas (medical)
Carbonatis }	"	Gen.	F.	1	Cascarilla
Cascarillæ.	"	Gen.	F.	1	Casia
Cassia	"	Gen.	F.	1	Castanea
Castanea	"	Gen.	F.	1	Castanea
Cera	"	Gen.	N.	2	Chloroformum
Chloroform	Chloroformi	Gen.	F.	1	Cinchona
Cinchonæ	"	Gen.	N.	2	Cinnamomum
Cinnam.	Cinnamomi	Gen.	N.	2	Cochloare or cochlearia
Coch.	Cochloare or cochlearia	Accus.	N.	3	Cochloare (medic.)
Coloc.	Colocynthis	Gen.	F.	3	Colocynthis "
Cons.	Conservæ	Gen.	F.	1	Conserva
Cruri.	"	Dat.	N.	3	Crus—cruris
Cynosb.	Cynosbati	Gen.	F.	2	Cynosbates
Dio	"	Abl.	F.	3	Diæ—often M.; but a set day is F. (time when)
Dose	"	Ahl.	F.	3	Dosis
Drachmas.	"	Accus.	F.	1	Drachma 3j.
Elect. (x.)	Electuarii	Gen.	N.	2	Electuarium.
Electuarium.	"	Nom.	N.	2	Emplastrum
Empl.	Emplastrum	Nom.	N.	2	Ether (aidip)
Ether. (xi)	Etheris	Gen.	M.	3	Extractum
Ext.	Extracti	Gen.	N.	2	Diæ—often M.; but a set day is F. (time when)
Febre	"	Abl.	F.	3	Febris
Febricula	"	Nom.	F.	1	Febricula
Fellis	"	Gen.	N.	3	Fel
Fer.	Ferri	Gen.	N.	2	Ferrum
Fistula	"	Gen.	F.	1	Fistula
Garg.	Gargarisma	Nom.	N.	3	Gargarisma
Glycyrrhizæ.	"	Gen.	F.	1	Glycyrrhiza
Granum.	"	Accus.	N.	2	Granum, pl. grana
Guttæ	"	Nom.	F.	1	Gutta
Horæ	Gargarisma	Nom.	N.	3	Gargarisma
Horis	"	Gen.	F.	1	Glycyrrhiza
Horas	"	Accus.	N.	2	Granum, pl. grana
Hyd. c. Croc. ..	Hydargyri c. Cretæ	Gen.	F.	1	Gutta
Hydrarg.	Hydrargyri	Gen.	N.	2	Hydrargyrum
Hydrargyri	"	Gen.	F.	3	Hydrochlorat
Hydrochloratis ..	"	Gen.	M.	2	Hyoscyamus
Hyoscyam.	Hyoscyami	Gen.	F.	2	Ipecacuanhæ
Ipecac.	Ipecacuanhæ	Gen.	N.	2	Iodidum
Iodid.	Iodidi	Gen.	N.	2	Iodidum
Lact.	Lactis	Gen.	N.	3	Lac., acc. m.
Limonis.	"	Gen.	F.	3	Linon [Lactem]
Liq.	Liquoris	Gen.	M.	3	Liquor
Liquori	"	Dat.	M.	3	Liquor
Lotio	"	Nom.	F.	3	Lotio
Lyttæ	"	Gen.	F.	1	Lytta
Magnes.	Magnesie	Gen.	F.	1	Magnesia
Mane	Neut. indeclinable	Abl.	N.	1	Sometimes Adverb
Mistura	"	Nom.	F.	1	Mistura
Modo	"	Ahl.	M.	2	Modus
Mucilaginis	"	Gen.	F.	3	Mucilago (Medical)
Myrrh.	Myrrhæ	Abl.	F.	1	Myrrha
Nitr.	Nitratis	Gen.	N.	3	Nitras (Medical)
Nitros	"	Gen.	N.	3	Nitras (Medical)
No.	Numero	Abl.	M.	2	Numerus.
Noct. (ix.) }	Numero	Acc. Pl.	M.	2	Numerus.
Nocte }	Noctibus	Abl. Pl.	F.	3	Nox.
Oculo	Olei	Ablat.	M.	2	Oculus
Ol.	"	Gen.	N.	2	Oleum
Oliv.	Olivæ	Gen.	F.	1	Oliva
Opil.	"	Gen.	N.	2	Opium
P.	Pulveris	Gen.	M.	3	Pulvis
Partem }	"	Accus.	F.	3	Pars
Partes }	"	Acc. Pl.	F.	3	Pars
Parti }	"	Dat.	M.	3	Pes
Pedi }	"	Dat.	M.	3	Pes
Pil.	Pilulæ	Nom. Pl.	F.	1	Pilula [(Medical)]
Podophil.	Pilulas	Accus.	F.	1	Pilula [(Medical)]
Potass.	Podophylli	Gen.	N.	2	Podophyllum
Potassæ	Podophylli	Gen.	N.	2	Podophyllum
Pulp.	Potassæ	Gen.	N.	2	Potassium
Pulv.	Pulpe	Gen.	F.	1	Potassa
"	Pulveris	Gen.	F.	1	Pulpa
"	"	Gen.	M.	3	Pulvis
Q.	Quantitatem	Accus.	F.	3	Quantitas
Quantitatem	"	Gen.	F.	3	Quies
Quietis	"	Gen.	F.	1	Quies
Quinæ	"	Gen.	F.	1	Quina (Medical)
Radici.	"	Gen.	F.	3	Radix
Resinæ	"	Gen.	F.	1	Resina
Rhei	"	Gen.	N.	2	Rheum
Ros	Rosarum	Gen. pl.	F.	1	Rosa
Rosæ }	"	Gen.	F.	1	Rosa
Sacc.	Sacchari	Gen.	N.	2	Saccharum
Sarsaparillæ.	"	Gen.	F.	1	Sarsaparilla
Saturn.	Saturni	Gen.	M.	2	Saturnus
Scam.	Scammonii	Gen.	N.	2	Scammonium.
Scrupulum	(technical)	Accus.	N.	2	Scrupulum (3j.) usually, also Scrupulus
Sesquicarbonatis ..	"	Gen.	F.	3	Sesquicarbonas
Sodæ	"	Gen.	F.	1	Soda
Somni	"	Gen.	M.	2	Somnus
Sp.	Spiritus	Gen.	M.	4	Spiritus [(Medical)]
Subm.	Submuriatis	Gen.	N.	2	Succus
Submur. }	"	Gen.	N.	2	Sulphureti
Succi	"	Gen.	F.	3	Sulphuratis
Sulph.	Sulphureti	Gen.	F.	3	Sulphas
Sulph.	Sulphuratis	Gen.	N.	2	Sulphuricum
Sulph.	Sulphurici	Gen.	N.	3	Sulphur
Sulphuris	"	Gen.	N.	3	Sulphur
Syr.	Syrupi	Gen.	M.	2	Syrupus
Tart.	Tartratis	Gen.	F.	3	Tartras
Temp.	Temporis	Dat.	N.	3	Tempus
Tinct. }	Tincture	Gen.	F.	1	Tinctura
Unciam	"	Accus.	F.	1	Uncia (3j.)
Ung. (v., vj.) } ..	Unguentum	Nom.	N.	2	Unguentum
Usu.	Unguenti	Gen.	M.	4	Usus
Voratriæ	"	Ahl.	M.	1	Vasatra
Vesperi	(ἐσπερος)	Ahl.	M.	3	Vesper (Medical)
Vicæ	"	Accus.	F.	3	Defective Noun, vice, vicos
Vini	"	Gen.	N.	2	Vinum

TABULA SECUNDA. VERBS A.

LIST	Uncontracted Form.	Mood.	Tense.	Num-ber.	Per-son.	Verb.
Absento	"	Part.	and adj.	S	..	Absum
Addo	"	Imp.	Pres.	S	2	Addo
Admovo	Admove	Imp.	Pres.	S	2	Admoveo
Affect	Affecta	Part.	and adj.	..	..	Affecto & afficio
Appl.	Applicandum	Gerund	divo	..	..	Applico
Applicand	Applicanda	Gerund	divo	..	..	"
Augendo	Gerund	..	..	..	..	Augeo
Cap	Capiat	..	..	..	..	Capio
Capiat	"	Subj.	Pres.	S	3	"
Colo	"	Imp.	Pres.	S	2	Colo
Colato	Part.	..	..	..	..	"
Concisae	Part.	..	..	..	..	Concido
Contunde	"	Imp.	Pres.	S	2	Contundo
Contusae	Part.	..	..	..	..	"
Convaluerit	"	Ind.	Future	S	3	Coovalesco
Coque	"	Imp.	Pres.	S	2	Coquo
Cubitus	"	supine	..	..	..	Cubo
Destillare	Part.	..	supine	..	..	Destillo
Divide	"	Imp.	Pres.	S	2	Divido
Dicta	"	..	..	..	..	Dico
Evanerit	"	Indic.	Future	S	3	Evanescio
F	"	..	..	..	..	Fio
Fiat	Consult grammar for all tenses					
Fiant	"	..	..	..	..	"
Imminendo	Gerund	..	..	..	..	Imminuo
Imponend	Imponendum	Gerund	..	..	..	Impono
Iura	Future participle	Consult	grammar	..	..	..
Macera	"	Imp.	Pres.	S	2	Macero
Misce	"	Imp.	Pres.	S	2	Misceo
Mitto	"	Imp.	Pres.	S	2	Mitto
Operandi	"	Gerund	..	..	..	Operor
Persistat	"	Subj.	Pres.	S	3	Persisto
Purif	Purificati	Part. perf.	..	..	..	Purifico
R	Recipe	Imp.	Pres.	S	2	Recipio
Repetendus	Gerund	divo	..	..	..	Repeto
Sig	' Signa	Imp.	Pres.	S	2	Signo
Sigr	Signetur	Subj.	Pres.	S	3	"
Sum	Consult grammar	for all tenses	..	..	..	Sum
Sumat	"	Subj.	Pres.	S	3	Sumo
Sumantur	"	Subj.	Pres.	P	3	"
Sumend	Gerund	divo	..	..	..	"

The Subjunctive is also called the Conjunctive mood.

TABULA SECUNDA. VERBS B.

Conjugation.

Absum	to be away. Absent, abfui, abesse. V. n. irreg.
Addo	to add. Addidi, addere, additum. 3 v. a.
Admovo	to move to. Admovi, admovere, admotum. 2 v. a.
Affecto	to be seized with disease. Affectari morbo. Liv. so used in prescriptions. Affectavi, affectare, affectatum. 1 v.
Applico	to apply i.e. attach to. Applicavi, are, atum. 1 v. a.
Augeo	to increase. Auxi, augere, auctum. 2 v. a. and n.
Capio	to take. Cepi, capere, captum. 3 v. a.
Colo	to strain. Avi, are, atum. 1 v. a. (medical). Not colo; ui, ere, cultum, to cultivate.
Concido	to cut up. Cidi, ere, cisum. 3 v. a. Not concido, to fall down.
Contundo	to crush or bruise. Tudi, ere, tusum. 3 v. a.
Convalresco	to regain health. Convalui, ere. 3 v. incep.
Coquo	to cook, digest. Coxi, ere, coctum. 3 v. a.
Cubo	to lie down. Cubui, are, cubitum. 1 v. n.
Destillo	to distil. Avi, are, atum. 1 v. a. and n.
Divido	to divide. Divisi, dividere, divisum. 3 v. a.
Dico	to say. Dixi, dicere, dictum. 3 v. a.
Evanescio	to vanish, disappear. Evanui, evanescere. 3 v. n. incep. (French, évanouir).
Fio	to be made. Consult Grammar for all tenses.
Imminuo	to decrease. Inui, ere, itum. 3 v. a.
Impono	to place upon. Sui, ere, situm. 3 v. a.
Macero	consult Grammar for all tenses.
Misceo	to macerate. Avi, are, atum. 1 v. a.
Mitto	to mix. Misui, ere, mistum or mixtum. 2 v. a.
Operor	to send. Misi, mittere, missum. 3 v. a.
Persisto	to work. Ari, atus. 1 v. n. dep.
Purifico	to continue. ere, stit. 3 v. n.
Recipio	to purify. Avi, are, atum. 1 v. a.
Repeto	to take. Cepi, ere, ceptum. 3 v. a.
Signo	to repeat. Ivi or Ii, ere, itum. 3 v. a.
Solve	to sign. Avi, are, atum. 1 v. a.
Sum	to dissolve. Solvi, ere, solutum. 3 v. a.
Sumo	to be. Consult Grammar for all tenses.
	to take. Sumpsit, ere, sumptum. 3 v. a.

NOTE.—The order of Conjugation here adopted is, 1. Present, 2. Perfect, 3. Infinitive, and 4. Supine. Other orders are adopted. Formerly the Infinitive came last, and the second person Indicative was given, as, 1. Amo, 2. Amas, 3. Amavi, 4. Amatam, 5. Amare. In these Verb Tables high modern grammatical distinctions, relating to Verbs Finite and Infinitive, Verb-Nouns and Verbal Adjectives, have been omitted as foreign to the purpose. Their definitions will be found in the manual already recommended.

TABULA TERTIA. VARIOUS.

A	Aromatici. Adj. M. sing. gen. <i>Aromaticus</i> .
Al	of each. Ana, ava.
Ad	up to. Preposition. Governs accusative.
Atque	and. Conjunct. Used in poetry.
Aur	golden, aurati. Adj. N. sing. gen. <i>Auratus</i> .
Bovini	relating to oxen. Adj. N. sing. <i>Bovinus</i> .
C	with. Preposition. Governs ablative.
Co	compound. Adject. Occurs in various cases.
Compos	to-morrow. Adv. In prescriptions often means next day.
Cras	of which. Pron. relat. gen.
Cajus	with. Conj. Governs ablative.
Cum	then or afterwards. Adv.
Deinde	to the right, dextro. Adj. N. sing. dat. <i>Dexter</i> .
Dextr	until. Adv.
Donec	two. Numer. card. (duo) (deux). F. plur. accus. <i>Duo</i> .
Duas	at the same. Pron. F. sing. abl. <i>Is</i> .
Eadem	and. Conj.
Et	from. Prep. Governs ablat.
Ex	this. Pron. demonst. F. sing. abl. <i>Hic</i> .
Hac	intimately, very well. Adv.
Iotime	into. Prepos.
In (acc.)	in. Prepos.
In (abl.)	Adj. F. sing. gen.
Jamaicensis	with gentle. Adject. M. sing. abl. <i>Lenis</i> .
Leni	light. Adj. F. sing. gen. <i>Levis</i> .
Levis	great. Occurs in various cases. <i>Magnus</i> .
Magn	soft. Adj. N. sing. nom. <i>Mollis</i> .
Magna	Molle
Molla	all, every. F. sing. abl. <i>Omnis</i> .
Omni	small, smallish. Adj. dimin. N. sing. abl. (In prescriptions used as <i>Parvus</i>) <i>Parvus</i> .
Parvulo	for. Prepos. Governs ablat.
Per	behind. Here prepos., also adv. Governs accus.
Pro	wholly, thoroughly. (In this passage, but it has other meanings.) Adv.
Pene	every, quaque. Pron. indef. F. sing. abl. <i>Quisque</i> .
Prorsus	as much as required, quantum sufficit.
Q. q.	fourth. Ord. num. used in various cases. Here accus.
Q. s.	sing. and abl. plur.
Quartam	daily, every day. Adv.
Quartis, 4tis	second. Adj. F. sing. abl. <i>Secundus</i> .
Quotidie	at once, together, at the same time. Adv.
Secunda	each. Generally implies continuance. Thus singulis
Simul	noctibus, every night without intermission.
Sing	often. Adv.
Singulis	three times, thrice. Adv. num.
Sope	one. Numer. card. N. sing. abl. <i>Unus</i> .
Ter	one. Num. card. N. sing. abl. <i>Unus</i> .
Uno	so that. as. (Adver. xii.)
Ut	or. Conj.
Vel	

NOTE.—Learn the declension of Duo, Hic, Is, Quis, and Unus.

TABULA QUARTA. NUMERALS.

The signs for numbers are so well known that some hesitation is felt in offering any notice. They may be divided into four classes:—

(1.) Cardinal numbers are the chief, namely, I., II., III., IV. and the like. The term is derived from *cardo* a hinge, being those on which the other numerals hinge.

(2.) Ordinal numerals, are those which indicate numerical rank (*ordo*) as *primus*, *secundus*, *tertius*.

(3.) Distributive numerals denote so many each, or at each time, as *quini*, *seni*, *septeni*.

(4.) Numeral adverbs denote the number of times that anything happens or is done, as *bis*, *ter*, *quater*.

Four in classical Latin is *quattuor*; in prescriptions and medical Latin, *quatuor*.

A very useful rule to recollect is, that after the number, twenty, 20, XX., the compound smaller number is put first with the conjunction *et*, thus, forty-three, 43, XLIII., is *tres et quadraginta*; thirty-seven, 37, XXXVII., is *septem et triginta*.

	CARDINAL.	ORDINAL.	DISTRIBUTIVE.	ADVERBS.
I.	unus	primus	singuli	semel
II.	duo	secundus, or alter	himi	his
III.	tres	tertius	terni, or trini	ter
IV.	quatuor	quartus	quaterni	quater
V.	quinque	quintus	quinti	quinquies
VI.	sex	sextus	seni	sexies
VII.	septem	septimus	septeni	septies
VIII.	octo	octavus	octeni	octies
IX.	novem	nonus	noveni	novies
X.	decem	decimus	deni	decies
XI.	duo decem	duo decimus	duo deni	duo decies
XII.	tres decem	tres decimus	tres deni	tres decies
XIII.	quatuor decem	quatuor decimus	quatuor deni	quatuor decies
XIV.	quinque decem	quinque decimus	quinque deni	quinque decies
XV.	sex decem	sex decimus	sex deni	sex decies
XVI.	septem decem	septem decimus	septem deni	septem decies
XVII.	octo decem	octo decimus	octo deni	octo decies
XVIII.	novem decem	novem decimus	novem deni	novem decies
XIX.	decem decem	decem decimus	decem deni	decem decies
XX.	undecim	undecimus	undeceni	undecies
XXI.	duodecim	duodecimus	duodeceni	duodecies
XXII.	tredecim	tredecimus	tredeceni	tredecies
XXIII.	quoddecim	quoddecimus	quoddeceni	quoddecies
XXIV.	quintodecim	quintodecimus	quintodeceni	quintodecies
XXV.	sexdecim	sexdecimus	sexdeceni	sexdecies
XXVI.	septendecim	septendecimus	septendeceni	septendecies
XXVII.	octodecim	octodecimus	octodeceni	octodecies
XXVIII.	novendecim	novendecimus	novendeceni	novendecies
XXIX.	viginti	viginti	viginti	viginti
XXX.	triginta	triginta	triginta	triginta
XXXI.	triginta et unus	triginta et primus	triginta et singuli	triginta et semel
XXXII.	triginta et duo	triginta et secundus	triginta et himi	triginta et his
XXXIII.	triginta et tres	triginta et tertius	triginta et terni	triginta et ter
XXXIV.	triginta et quatuor	triginta et quartus	triginta et quaterni	triginta et quater
XXXV.	triginta et quinque	triginta et quintus	triginta et quinti	triginta et quinquies
XXXVI.	triginta et sex	triginta et sextus	triginta et seni	triginta et sexies
XXXVII.	triginta et septem	triginta et septimus	triginta et septeni	triginta et septies
XXXVIII.	triginta et octo	triginta et octavus	triginta et octeni	triginta et octies
XXXIX.	triginta et novem	triginta et nonus	triginta et noveni	triginta et novies
XL.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies
XLI.	triginta et undecim	triginta et undecimus	triginta et undeceni	triginta et undecies
XLII.	triginta et duodecim	triginta et duodecimus	triginta et duodeceni	triginta et duodecies
XLIII.	triginta et tredecim	triginta et tredecimus	triginta et tredeceni	triginta et tredecies
XLIV.	triginta et quoddecim	triginta et quoddecimus	triginta et quoddeceni	triginta et quoddecies
XLV.	triginta et quintodecim	triginta et quintodecimus	triginta et quintodeceni	triginta et quintodecies
XLVI.	triginta et sexdecim	triginta et sexdecimus	triginta et sexdeceni	triginta et sexdecies
XLVII.	triginta et septendecim	triginta et septendecimus	triginta et septendeceni	triginta et septendecies
XLVIII.	triginta et octodecim	triginta et octodecimus	triginta et octodeceni	triginta et octodecies
XLIX.	triginta et novendecim	triginta et novendecimus	triginta et novendeceni	triginta et novendecies
L.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies
LI.	triginta et undecim	triginta et undecimus	triginta et undeceni	triginta et undecies
LII.	triginta et duodecim	triginta et duodecimus	triginta et duodeceni	triginta et duodecies
LIII.	triginta et tredecim	triginta et tredecimus	triginta et tredeceni	triginta et tredecies
LIV.	triginta et quoddecim	triginta et quoddecimus	triginta et quoddeceni	triginta et quoddecies
LV.	triginta et quintodecim	triginta et quintodecimus	triginta et quintodeceni	triginta et quintodecies
LVI.	triginta et sexdecim	triginta et sexdecimus	triginta et sexdeceni	triginta et sexdecies
LVII.	triginta et septendecim	triginta et septendecimus	triginta et septendeceni	triginta et septendecies
LVIII.	triginta et octodecim	triginta et octodecimus	triginta et octodeceni	triginta et octodecies
LIX.	triginta et novendecim	triginta et novendecimus	triginta et novendeceni	triginta et novendecies
LX.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies
LXI.	triginta et undecim	triginta et undecimus	triginta et undeceni	triginta et undecies
LXII.	triginta et duodecim	triginta et duodecimus	triginta et duodeceni	triginta et duodecies
LXIII.	triginta et tredecim	triginta et tredecimus	triginta et tredeceni	triginta et tredecies
LXIV.	triginta et quoddecim	triginta et quoddecimus	triginta et quoddeceni	triginta et quoddecies
LXV.	triginta et quintodecim	triginta et quintodecimus	triginta et quintodeceni	triginta et quintodecies
LXVI.	triginta et sexdecim	triginta et sexdecimus	triginta et sexdeceni	triginta et sexdecies
LXVII.	triginta et septendecim	triginta et septendecimus	triginta et septendeceni	triginta et septendecies
LXVIII.	triginta et octodecim	triginta et octodecimus	triginta et octodeceni	triginta et octodecies
LXIX.	triginta et novendecim	triginta et novendecimus	triginta et novendeceni	triginta et novendecies
LXX.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies
LXXI.	triginta et undecim	triginta et undecimus	triginta et undeceni	triginta et undecies
LXXII.	triginta et duodecim	triginta et duodecimus	triginta et duodeceni	triginta et duodecies
LXXIII.	triginta et tredecim	triginta et tredecimus	triginta et tredeceni	triginta et tredecies
LXXIV.	triginta et quoddecim	triginta et quoddecimus	triginta et quoddeceni	triginta et quoddecies
LXXV.	triginta et quintodecim	triginta et quintodecimus	triginta et quintodeceni	triginta et quintodecies
LXXVI.	triginta et sexdecim	triginta et sexdecimus	triginta et sexdeceni	triginta et sexdecies
LXXVII.	triginta et septendecim	triginta et septendecimus	triginta et septendeceni	triginta et septendecies
LXXVIII.	triginta et octodecim	triginta et octodecimus	triginta et octodeceni	triginta et octodecies
LXXIX.	triginta et novendecim	triginta et novendecimus	triginta et novendeceni	triginta et novendecies
LXXX.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies
LXXXI.	triginta et undecim	triginta et undecimus	triginta et undeceni	triginta et undecies
LXXXII.	triginta et duodecim	triginta et duodecimus	triginta et duodeceni	triginta et duodecies
LXXXIII.	triginta et tredecim	triginta et tredecimus	triginta et tredeceni	triginta et tredecies
LXXXIV.	triginta et quoddecim	triginta et quoddecimus	triginta et quoddeceni	triginta et quoddecies
LXXXV.	triginta et quintodecim	triginta et quintodecimus	triginta et quintodeceni	triginta et quintodecies
LXXXVI.	triginta et sexdecim	triginta et sexdecimus	triginta et sexdeceni	triginta et sexdecies
LXXXVII.	triginta et septendecim	triginta et septendecimus	triginta et septendeceni	triginta et septendecies
LXXXVIII.	triginta et octodecim	triginta et octodecimus	triginta et octodeceni	triginta et octodecies
LXXXIX.	triginta et novendecim	triginta et novendecimus	triginta et novendeceni	triginta et novendecies
LXXXX.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies
LXXXXI.	triginta et undecim	triginta et undecimus	triginta et undeceni	triginta et undecies
LXXXXII.	triginta et duodecim	triginta et duodecimus	triginta et duodeceni	triginta et duodecies
LXXXXIII.	triginta et tredecim	triginta et tredecimus	triginta et tredeceni	triginta et tredecies
LXXXXIV.	triginta et quoddecim	triginta et quoddecimus	triginta et quoddeceni	triginta et quoddecies
LXXXXV.	triginta et quintodecim	triginta et quintodecimus	triginta et quintodeceni	triginta et quintodecies
LXXXXVI.	triginta et sexdecim	triginta et sexdecimus	triginta et sexdeceni	triginta et sexdecies
LXXXXVII.	triginta et septendecim	triginta et septendecimus	triginta et septendeceni	triginta et septendecies
LXXXXVIII.	triginta et octodecim	triginta et octodecimus	triginta et octodeceni	triginta et octodecies
LXXXXIX.	triginta et novendecim	triginta et novendecimus	triginta et novendeceni	triginta et novendecies
LXXXXX.	triginta et decem	triginta et decimus	triginta et deni	triginta et decies

Having thus cleared the ground, we proceed at once to grammatical construction, attention to this, joined to thorough acquaintance with the *ipsissima verba* of prescriptions, will disarm any dread that may have been felt with regard to the Latin portion of an examination. I earnestly commend the diligent study of the Public School Latin Primer, published by Longman, and I would ask our provincial associations to add a few loan copies of it to their libraries.

I. The mass of formulæ are constructed on one plan—*R*, meaning *recipe*, stands at the commencement. The common rule is, place the quantity in the accusative, the ingredient in the genitive, the adjective in the same case, number, and gender as the substantive. But it is better to know the exact nature of this construction, and to give a reason for the faith within us, else a candidate's reply may be a fluke and not an answer. Recipe is a verb Active Transitive; imperative mood, second person, and *demands*, or takes, or governs an accusative case.

R Magnes. Pond. Opt. ζj . is therefore

Recipe, Magnesiae Ponderosae Optimæ, drachmam. This is more correct than to say *drachmam unam*, for the accusative singular of the Latin word expresses one definite quantity and no other.

Two classes of verbs immediately concern us, those of the Active voice—as *sumo*, I take; and those of the Passive voice *capior*, I am taken.

Here, though rules are not to be despised, common sense may be our guide. When it is said *sumat partes tres*, an Active Transitive verb passes on to the substantive placed after it. This substantive both in grammar and, according to our intelligence, is "the object," and therefore in the phrase "let him take three parts," *partes tres* is in the accusative. On the other hand, if it be said, *sumantur partes tres*—the verb is intransitive—the action does not pass on—*sumantur* does not govern, but is governed. It ceases therefore to be in the singular; becomes the third person plural, because then *partes tres* is the nominative case. Try this practically for a moment. Not only shall we get correct translation, but we shall discover the correct termination of the Latin word, thus *mitte Sp. Ether Chlor. ζj* .

S. gutt. xxx. p.r.n.

being the one prescription written by Charles Dickens for himself.

Mitte, verb active, with accusative of the object. *Sp. ether. chlor.*, genitive case, being described and translated by the word *of*

ζj must be the accusative governed by *mitte*.

S. gutt. xxx. may be given in two ways, either

Sumat	}	guttas xxx.
or sumantur		guttæ xxx.

Supposing we had tabulated this line, we should have got out the words with full grammatical construction.

Mitte	Chlorici	Sumat	Guttas
Spiritus	Drachmas	Sumantur	Triginti
Etheris	Duas	Guttæ	Pro
			Re-nata

Then we have—

Mitte, Spiritus Etheris Chlorici, drachmas duas.	
Sumat Guttas Triginti,	} Pro Re-nata
or Sumantur Guttæ Triginti	

This seems to shut out the possibility of error. Nevertheless, there are two verbs that must be committed to memory. I ask the student to do this, because it will save him much annoyance—they are *Sum*, I am; and *Fio*, be made. One decent evening's work will master them both: they are profoundly irregular, and take the same case after them as before them. Thus—

f. Mist.	=	fiat Mistura
f. Pil. ij.	=	fiant Pilulæ Duæ.

The anomalous verbs—that is, verbs not formed by rule—necessary to be learned are—

Possum	..	..	..	..	be able
Volo	..	..	..	..	wish

Nolo	..	..	..	..	not wish
Malo	..	..	..	..	wish rather
Fero	..	..	..	..	bear
Fio	..	..	..	..	be made
Go	..	..	..	..	go
Queo	..	..	..	..	can

They turn up in prescriptions uninvited guests, and are frequent sources of embarrassment.

II.

THE GENITIVE CASE.—The ingredient in a prescription is put in the Genitive because it comes after, and is put in relation to the substantive stating the quantity, thus:—

R Sod. Potass. Tart. ζj is

Recipe Sodæ Potassio-Tartratis, drachmas duas. The genitive answers to the word "of," and is best understood by the English term "Possessive." When two substantives having a relation to each other come together, that which marks the relation or possession is put in the genitive—as *Tinctura Zingiberis*, *Mistura Ferri*. This construction is simplified by applying to it and adapting modern chemical nomenclature—these two illustrations accurately mean the Ginger Tincture and the Iron Mixture—the words *Tinctura* and *Mistura* might occur in an indefinite series; but the words *Zingiberis* and *Ferri* show the substances by which they then happen to be possessed and in relation to which they stand—hence they are both Genitive. Adjectives agree with their substantive in gender, number and case—participles, gerunds and supines, all words used adjectively follow the same rule, and their study may consequently be dismissed. It is necessary, however, to let each adjective agree with its own substantive—Hence

Sp. Ammon. Arom. = *Spiritus Ammoniae Aromaticus*; it is the Aromatic Spirit of Ammonia, not the Spirit of Aromatic Ammonia. So also

T. Cinchon. Co = *Tinctura Cinchonæ Composita*. While *T. Cinchon. flav.* = *Tinctura Cinchonæ flavæ*—for it is the Tincture of Yellow Bark, not the Yellow Tincture of Bark.

III.

THE ABLATIVE CASE.—Most frequently translated by *in*, *by*, or *with*. Many prepositions govern this case, as *e*, *ex*, *de*, *cum*, and *pro*, some verbs, as *utor*, *fungor*, and *fruo*. The ablative absolute, is a case that frequently occurs, the easiest to be translated, and the one, judging from experience, least understood. It forms the stumbling-block in Caesar's "Commentaries." The plan I have recommended with uniform success, is to take any difficult chapter "De Bello Gallico," and with red ink strike out every ablative absolute in a sentence. The print need not be obscured, and the passage will at once become intelligible. It adds to the force, the exactness, and to the explanatory character of the sentence, but seldom interferes with the general sense, and for a reason. The ablative absolute is the *absolutus ablativus* (*absolvere* to set free), and it is so called because it stands by itself, is governed by nothing, depends on nothing, and is released from all rule but its own. In its first and ordinary form, it is a substantive combined with a participle in the ablative, the school example, is *Regibus exactis consules creati sunt*.

We scarcely get a dozen prescriptions without one or more illustrations. Consult VIII. *M. ft. pulv. : omni mane absente febre repetendus*. "Fever being absent" is the ablative absolute case. Another substantive, or an adjective, may be substituted for the participle. The school example is very good—*Natus est Augustus consulibus Cicerone et Antonio*. *D. V. Deo Volente*, a phrase used constantly by the devout, is a true ablative absolute.

Or shall we take the familiar quotation in an argument,—"*cæteris paribus*, other things being equal," which is a pure Ablative Absolute. In prescriptions it is indispensable to note this case, else directions otherwise clear become obscure.

IV.

In meaning "in" governs the Ablative. *In* meaning "into" governs the Accusative,

thus in { *partibus tribus* } A mass is usually divided *in* so
 { *partes tres*. } many pills; a powder generally distributed *into* powders.

V.

Time when, is put in the Ablative,

Time how long—duration—is put in the Accusative.

Note this carefully, and frequent mistakes may be avoided:—

Sumat partem sextam omni quarta hora. Take a sixth part. When? At what time?

ANSWER. Every four hours; therefore o.q.h is in the Ablative.

Persistet dies tres in usu pilularum. Continue the use of the pills. How long?—for what duration of time? Three days; therefore, dies tres is in the Accusative. Even in medical prescriptions this rule is occasionally disregarded. Capiat coch. ampl. partem horæ quartam cannot be justified. When is this to be taken? Every quarter of an hour; read, therefore, parti quaque horæ quartâ. Should the patient persevere in taking his dose for the space of fifteen minutes, as the directions would imply, he would perhaps think favourably of homœopathic treatment.

It is impossible on paper to give useful instruction respecting correct translation,—at this point the value of personal teaching and advice is most felt.

The golden rule is, never translate unless compelled, using words or phrases that would not naturally be given by the prescriber when writing English. Be severe, inexorable judges of yourselves—and having executed a translation, say, should I in giving directions to a friend have used those words? Thus *bis vel ter die*: writing a note you would say, *twice or thrice*; in conversation you would say, two or three times a day; both are correct. *Twice or three times a day* (with a view of translating *ter*) is incorrect. A learned grammarian defines *alv. adstl.*, *alvo adstricta*, when the belly is bound, for which modern culture would substitute, “when the bowels are confined.” There is a very curious term *deaurantur pilulæ*—let the pills be gilded, equivalent to the French *desservir* applied to places which are served by railways—the meaning of these words is in exact opposition to their construction. In practice the present of the Subjunctive is elegantly translated by the Imperative—thus

Sumat } coch. min. j. ex aquæ cyathos
Capiat }

is best translated, not *let him*, let (the patient) take; for that we should never write, but “take,” which is precisely what we should.

I leave this portion of the subject altogether, well aware that a few evening conversations with varied specimens of formulae in hand, would be of more avail than a printed essay. In this a student is under disadvantage who has not the aid of some well-informed adviser; correctness can be always gained; general reading and educated companions are material aids in securing requisite refinement. I offer these suggestions in the hope that they may impress the mind with the necessity for adopting some definite plan. Desultory study, though accompanied with a laudable degree of application, is barren in result. Should the method now proposed seem weak or undesirable, by all means let it be supplanted by a better—but plan there must be—wherefore, I hold in honour those who have proved intelligent guides in directing work. No teacher can teach anything—the best can only show us how to learn. There are amongst us a large class to whom scholastic opportunities have been denied, and who, in after years, awaking to the necessities of their position, hindered by other cares, and ignorant of method, start late upon the race. To them I am but too happy to give a cordial word of welcome, and to endeavour to smooth their pathway, though at the risk of being accounted a disciple of the superficial. Will my younger brethren in pharmacy meditate on these sentences which have been strung together to beguile the long lingering hours of illness, and which have been literally written,

“*pilulæ recubans sub tegmine fagi*?”

The story is told of a Canadian physician who wrote to inquire if there were an opening for him in Detroit, Mich., and received a reply to the effect that there are already as many doctors as undertakers in the city, and if he concluded to come he had better bring an undertaker as silent partner with him.

AT THE EXHIBITION.—III.

SODA-WATER APPARATUS.

THE exhibition of “foods” at South Kensington is almost exclusively confined to the fringe of the subject, and scarcely touches the more substantial body. Australian meat is about the most solid specimen of food to be found, except what Messrs. Spicers and Pond dispense, or is offered among the luxuries of the fatherland on sale in the German Bier-Garten. Mustard, macaroni, and an abundance of cocoas are prominent, as well as cigars and tobacco; but respecting these we shall have more to say next month. Our present concern is with the very light but undoubtedly popular form of refreshment which, in the various shapes of aerated waters, has attained such a strong position in British consumption, and is of so much importance in the business of a chemist and druggist.

The collection of aerated water machinery and of aerated waters themselves is very good as far as it goes, but is exceedingly meagre. It would not have been at all difficult, and it would have been exceedingly attractive, if a little trouble had been taken to get together apparatus illustrative of the manufacture from its earliest date.

The manufacture of aerated waters is based on the power which water possesses of combining with carbonic acid gas. At ordinary atmospheric pressure water will hold in solution about its own bulk of the gas, but as the pressure is increased, the quantity of gas which can be absorbed increases also, and this gas remains thus absorbed until the pressure is removed, when it is given off in small bubbles, in the way so familiar to all on the opening of a soda-water bottle.

The means used for effecting this combination under pressure may be divided into three heads:—

1stly. Employing the pressure generated in the evolution of the gas by mixing carbonate of lime and sulphuric acid.

2ndly. Pumping the gas by mechanical means into a vessel already filled with water.

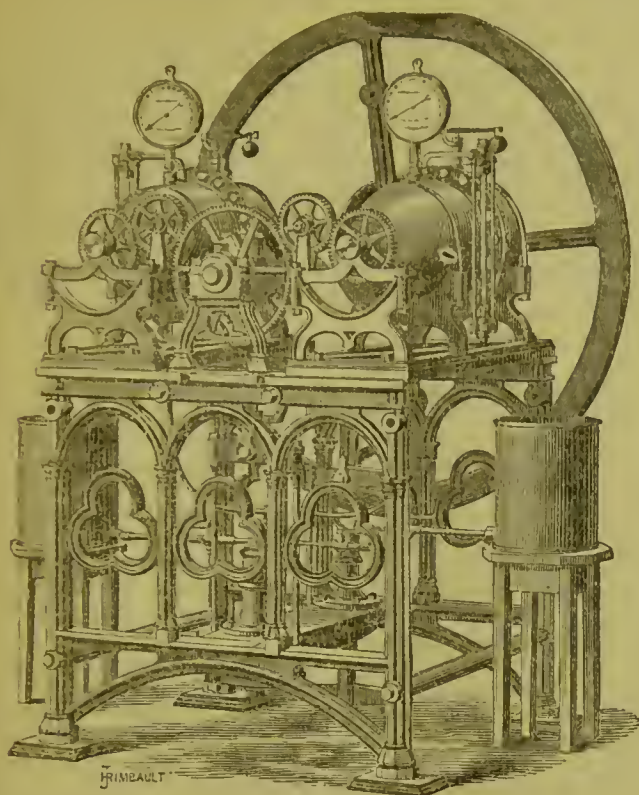
3rdly. Pumping the gas and water together by a suitably constructed pump into a condensing vessel, where they are mixed by a revolving agitator.

The third plan, which is known as the “continuous principle,” is almost universally adopted by manufacturers of these waters at the present day. Previous to the inventions of Bramah and Hamilton, it was customary to make and bottle off waters, batch after batch. But the time occupied, and the waste of gas, and difficulty of keeping up the full pressure was enormously felt. According to Bramah’s principle, the bottling proceeds simultaneously with the charging, and although modern makers have done much to perfect the machinery required, in its details, the principle adopted at the present day is identical with that introduced by Joseph Bramah in the early part of this century.

Messrs. HAYWARD TYLER and Co., of Whitecross-street, and Messrs. BARNETT and FOSTER, of Forston-street, Hoxton, are the exhibitors of machinery, and each of these eminent firms has supplied a very complete plant of apparatus. The process of bottling yields considerable amusement to the visitors, who evidently leave this portion of the Exhibition with exalted views of the complication of soda-water manufacture.

We cannot spare sufficient space to go through the whole of the apparatus exhibited, but we may place together drawings of the chief machines exhibited by each firm. The first engraving is a representation of Barnett and Foster’s double direct-acting soda-water machine, which is a very handsome, compact, and in all respects perfect machine for a large trade. It is of course intended for steam power, but can be readily adapted to hand power. If required, it is quite easy to use one of the cylinders for one kind of aerated water, and the other for a different sort; or, of course, one only can be used if desired. In case of requiring only one cylinder full at a time, the water can be passed from one to the other, thereby undergoing a double agitation, and perhaps ensuring more thorough impregnation of gas. A generator with a gasometer holding about 600 gallons, and three bottling machines, are connected with this apparatus. The makers claim that when driven by steam or other power, the machine is capable of

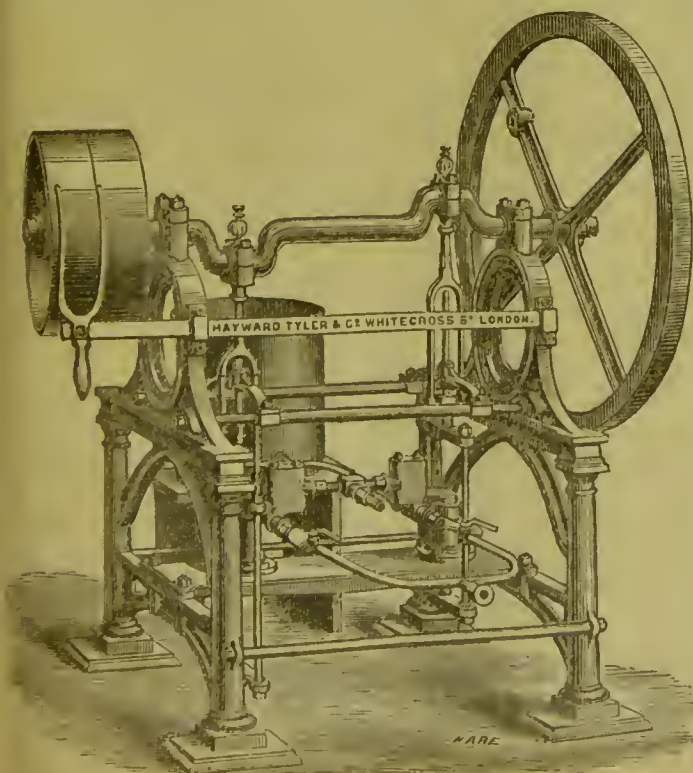
capable of producing that number must be unusually expert.



Barnett and Foster also exhibit at work one of their No. 1 single cylinder direct-action machines.

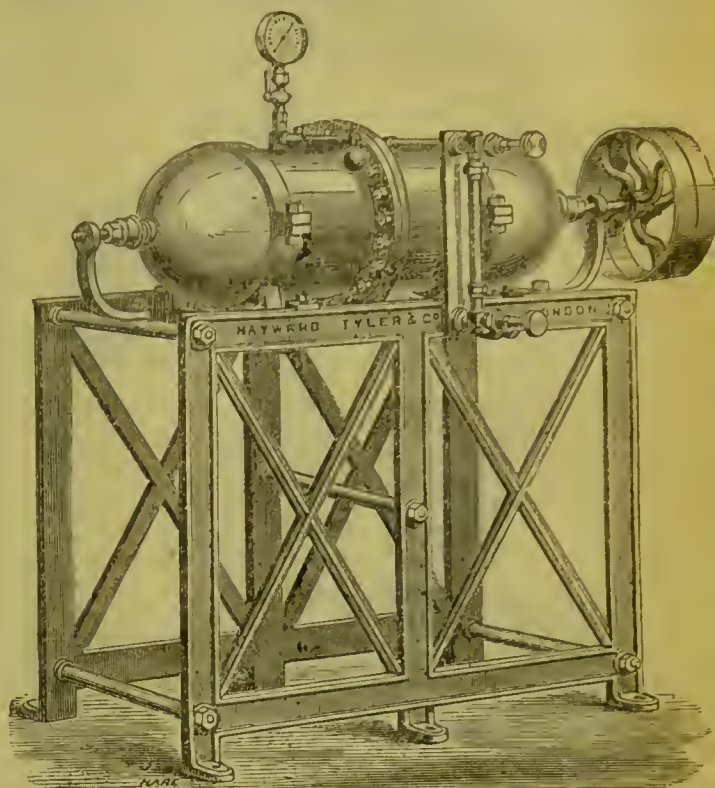
The particular machine exhibited and worked by Hayward Tyler and Co. is shown in the next engraving.

In order to facilitate the combination of powerful pumps with a condenser of large size, the pumps and condenser are placed in separate frames. The separation of the cylinder from the pumps of course demands more space, but has certain advantages; as for instance, more ready attention to a particular part of the machine. The pumps are two



in number, and pump gas and water together into the condenser. They are driven by a crank-shaft, and fast and loose pulleys with strap form the main shafting. The

condenser is of copper, placed horizontally in cast iron



frames, with agitator driven by pulleys from the shafting. The design of the frames is somewhat different to the engraving, but in other respects it correctly represents the machine exhibited. These machines are thoroughly strong and workmanlike, showing Messrs. Hayward Tyler and Co.'s usual careful handling, and evidently fair specimens of the style of work which has gained for this firm during more than fifty years such an excellent character.

The chief interest of the processes shown to ordinary visitors who may not have sufficient engineering skill to detect minute beauties or defects in the machines, lies in the bottling; and this is a matter of especial interest to practical men, because within ten yards of each other the bottling of the rival forms of corkless bottles is proceeding. Messrs. Barrett and Eler's patent is being worked at Hayward Tyler and Co.'s stand, and Codd's patent is the *pièce de résistance* at Barnett's. The former is the first patent of the two, and must be admitted to be very ingenious. In this system (Barrett and Eler's) the cork is superseded by a cylindrical stopper of glass or *lignum vite*, provided with a collar or cap of india-rubber, which fits up into the neck of the bottle. The stopper, when the bottle is empty, falls back into the bottle, and when it is full the pressure of the gas holds it up into its place, allowing no escape of pressure. The bottle is opened by pressing back the stopper with the finger. Thus there is no loss of the cork each time the bottle is opened, no violent explosion to endanger people's eyes and try their nerves, and no necessity for a corkscrew with a refractory cork, which, like Mr. Weller's celebrated periwinkles, declines to come out by ordinary means.

The bottling machines for filling these bottles are as ingenious as the bottles themselves, and do their work with wonderful rapidity, worked by boys of diminutive size. When lemonade, gingerade, &c., is being bottled, the charge of syrup is delivered into the bottle by a small measuring pump attached to the machine, with only one extra motion of the arm on the part of the bottler.

Messrs. BARRETT and ELERs have also a very ingenious arrangement for washing bottles. The bottles are inverted on a rack over a series of tubes, one of which passes into each. By turning on steam-power a strong jet of water is forced up into the bottles, effectually cleansing it.

Codd's bottle has been described in these columns before, but we show it again in comparison with its rival. The stopper, instead of being a long piece of wood, is simply a glass marble, and whereas in Barrett's bottle there is an india-rubber collar round each stopper, which forms the

washer, when the pressure of the gas forces the wood to the mouth of the bottle, in Codd's design the washer is permanently fixed just under the mouth, and the little globe



is forced up against it. Codd's bottle is certainly superior in this respect; namely, that when the marble is forced down it lodges above the shoulder of the bottle, consequently above the water, and there finds a receptacle so arranged that it cannot get back to the mouth unless the bottle is turned. In opening one of Barrett's bottles, however, the stopper is pushed into the water, and fastidious persons sometimes object to a piece of wood with an india-rubber collar being immersed in their refreshing draught. Besides the appearance, too, the presence of any solid body in these solutions causes an immediate liberation and consequent loss of gas.

Messrs. FLEET and Co., of Walworth, are manufacturing aerated waters, as are also the Malvern Waters Company. The former have a machine manufactured by Hayward, Tyler and Co., the cylinder and other parts of which are plated outside, and which has a very handsome effect. Of course this plating is of no use, and is only got up for show.

Medical Gleanings.

ON the 15th of this month is to occur the first attempt at Hospital Sunday in the metropolis. From over a thousand pulpits appeals will be made simultaneously on behalf of "the maimed, the halt, and the blind." To Canon Miller, now of Greenwich then of Birmingham, is due the credit of having first urged these Hospital Sundays in Birmingham, and grand success has resulted in that town, as well as in many other of the chief provincial centres. Liverpool has reached the highest figures of all, as she should do, her contribution of last year turning ten thousand pounds. But London will do poorly unless she far surpasses this sum. Not on account of mere rivalry is it to be hoped that the sum collected will be worthy of this great city, but because the money is urgently needed. There are abuses in our hospital system we well know, and in such vast institutions there can hardly fail to grow up some. But as a whole the London hospitals are in very deed the cities of refuge for the sick poor, who, already tormented, anxious, and almost conquered in their constant struggles to keep together all they can call a home, would inevitably be worsted when disease steps in, were it not for these hospitals and their generous attendants. We are confident that the result of this Hospital Sunday in London will show that the congregations are glad to have the opportunity of aiding in some little unostentatious manner their poorer fellow-citizens in the hour of their distress. One thing, however, seems to be regretted. That is that there

notice that the Prince of Wales will worship at St. Paul's Cathedral on that day.

The *Students' Journal* produces from the case-book of the surgical registrar of one of our metropolitan hospitals the most humorous article which had ever brightened those pages. Among the patients in a certain ward in that hospital were a ballet-girl and an elderly Irish woman with a bad foot. One Sunday evening, left only with one nurse in the ward, the ballet-girl took the fancy to seize the registrar's case-book, and read to each of the patients his notes on their particular complaints. She then amused herself by filling up one of the registrar's forms in reference to her Irish companion, and sketching out a highly imaginative history of the case. It ran thus:—

"Name of Patient: Ellen Muggins.

"Age: Between 20 and 72.

"Disease: An aggravating case of collywobles in the extreme collywoblical region, arising and extending to the big-toe.

"A few months ago Muggins—her husband—had an extra half-pint, and thought her foot was a black Beetle, and wishing to convince himself of this stepped on it and made a Blanc Mange of poor Mrs. Muggins' foot, and it is to this sad case of mistaken identity that society is deprived of one of its brightest ornaments. Although still in the prime of her Girlhood, she is, alas, toothless, not from any fault of Nature or Time, but through a fearful catastrophe which happened to her while discussing with Muggins the merits of a pint of the favourite fourpenny ale which stood in a pewter pot. Muggins made an observation to the effect that Women were all more or less Frail. Mrs. Muggins resented the unjust imputation on her sex and went in for Woman's Rights in a manner highly creditable to her, which Muggins repaid by dashing the pewter pot at her, thereby forcing her to swallow nearly all her teeth, and causing her to suffer from indigestion ever since. Never was a meal more regretted than that, she would even have preferred a little fat Tabby Kitten stuffed with sausages and stewed with Kid Gloves, but compulsion has no choice, and the unhappy Mrs. Muggins was forced to dine off her own Teeth; and another incident which has seriously impaired her beauty, it is the spring of the year, and she cannot disguise the fact, even from herself, she is moulting. The beautiful Chestnut tresses that once decked the front of her Head are now visible only through a powerful microscope, but nothing daunted at this, Ellen is a perfect Rachel in the art of beautifying and hairdressing with the aid of a handsome Comb which, like the fair owner, has seen misfortunes with its teeth. Ellen coaxes the refractory back tresses to come forward, but they are excessively shy and would much prefer their own native isle but for Ellen's frantic efforts; they come forth however, eventually, and wait anxiously for evening, when they are allowed to retire into an impudent little cap with a saucy frilled border and tied under the chin in a coquettishly small bow. She looks perfectly irresistible, and how Muggins could have been prevailed upon to part with her is a mystery known only to himself, but Ellen suspects the cause in a Certain Widow who lives on the second floor of Muggins' temporary abode. She, Ellen, knows that Muggins is a gay young rascal, and remembers with a pang of envy that the Widow has a very enticing way, which may not be without effect on Muggins' too susceptible Heart.

"These thoughts are too much for her, and she thinks she will go mad, but she turns over instead and falls into the arms of, no not Muggins, but Morpheus, and all unconscious of the faithful fidelity of the handsome pin Leg standing in the corner, lonely, neglected, and despised, and yet as untouched, pondering moodily on the turn events have taken and calculating the Chances of ever being called upon to do the Can Can with the Fascinating Ellen Muggins, and decides at length that it will not be done until Muggins appears on the scene, but thinks it not unlikely it may be called upon to do a little gentle exercise, as the surgeon who attends her now gives her the cold shoulder. Ellen suspects the Surgeon of having designs upon her injured Foot, and he fondly hoped that one day he might claim it for his own, to have and to hold, to teach his students with first, and then to bottle up and present to the British Museum or Cremorne Gardens; but Ellen, weak on some points, was firm in this, and resolved, at all hazards, to stick to her foot, even though she carries it out in her Hand, so the surgeon finding his fondly cherished hopes blighted and knowing Ellen's foot

Dresser is never in Town, and her House Surgeon never even asks her if she has got a Foot at all. Looked coldly on by her surgeon, neglected by her Dresser, ignored by her House Surgeon, what wonder the unhappy woman feels slighted in every quarter, and attributes it to the fact of her not having a scarlet flannel jacket with a frill round the neck and sleeves, which would have been so highly becoming to her style of Beauty, and materially altered this state of affairs: her surgeon would have been anxious about her, her Dresser would have stayed in Town, and her House surgeon might even have been brought to feel her Foot, and who knows she might have captivated the capricious Fancy of a stray student who would have offered her a Villa at Fulham or St. John's Wood, and two Hundred a-year with a promise of marriage *which he would be sure to keep*. Ellen would have been happy, but it is not too late, a somebody she must and will have, if it is only Muggins. Her mind is made up, she will go out, seek Muggins and induce him to leave the enticing widow and return to his first-love." We are sorry to have to add, that on being discovered this very promising young lady was discharged from the hospital for refractory conduct.

A French doctor (M. Donac) recently laid before the French Academy of Sciences a notion he had conceived of liquefying dead bodies, and transforming them into a syrup free from colour and smell. According to his calculation, a moderate sized man could be got into six bottles. The authority from which we derive our information omits to state the size of the bottles, but that is not the chief difficulty to our minds in converting M. Donac's idea into practical effect. There are some people who would never make syrup; Mr. Ayrton for example: sulphuric acid more likely.

The *Medical Press and Circular* protests against the publication, by some of its contemporaries, of "decoy" paragraphs respecting the health of potentates and great men, intended to catch a quotation in the daily papers, and thus occasionally to net an occasional advertisement. Without the least scientific or medical purpose it has been the habit to paraphrase the information cut from the penny papers of the previous day, to tack on a little popular surgery or anatomy, in order to give the paragraph a professional tint, and send the slip to the public newspapers for quotation. In this way we have had records of the maladies of every sick potentate without one scrap of special information or scientific application which might make the paragraph fit for a medical journal. We observe with pleasure that this *ruse* is not encouraged by the editors whose assistance is necessary to make it effective. The *Pall Mall Gazette* of the 23rd of May says—

"The *Lancet*, pursuing a practice which has been common in regard to eminent persons, though it appears to us offensive, has published an ominous account of the Pope's health. We do not pretend to judge of the technical details, and we think that the taste for their publication is essentially morbid, not to say indecent, but it requires no particular medical knowledge to see that when a man past eighty labours under a complication of serious diseases, the end cannot be far off."

A recent publication of the British death rate and its causes is curious reading. One man died from the bite of a cat; and two more from the bites respectively of a ferret and an adder. Another was stung to death by bees. A man and a boy died of falling from velocipedes, and an old lady was killed by injuries inflicted by that agreeable machine. The swallowing of a shell, a screw, and a cherry-stone, put a period to the lives of three infants, while two died of putting one a stone, the other a bead into the ear. Swallowing bones sent three people out of the world, swallowing coins finished two, and swallowing a pin quickly pricked on grim Death for one. A scratch from a thorn killed a woman of middle age; improper medicine poisoned eight people, and improper food five; 444 young children were smothered by bed-clothes, and 930 persons during the year lost their lives in railway accidents. The proportion of suicides to every million of the population is about 70, the deaths by hanging, the knife and drowning being most numerous. Heart disease, the year's record shows to be increasing, a state of things which is said by eminent physicians to be caused by the greater wear and tear of business and the increased mental activity of the age.

It is stated that the physicians of Phillipsburg, Pa., have adopted the singular plan of publishing the deaths which

occur in the practice of each, under his own name, quarterly, in the advertising columns of the county paper, with the cause of death "when known." This mode of proceeding must be eminently satisfactory to the younger members of the profession, who have but little practice and presumably few deaths, and it is quite the reverse of advertising cures and successes; but we should hardly venture to predict for it any great popularity.

THE ANNUAL MEETING OF THE PHARMACEUTICAL SOCIETY.

HELD AT 17, BLOOMSBURY-SQUARE, MAY 21ST, 1873.

THE Annual Meeting of the Pharmaceutical Society, on May 21st—the thirty-second anniversary of its existence, was certainly not lacking in the liveliness which has characterized these gatherings during the past few years, though it is very doubtful if its debates were equal in interest, importance, or ability, to some of its well-remembered predecessors. The theatre was well filled, and proceedings commenced almost precisely at noon. The President, Mr. A. F. Haselden, was heartily received, and made a business-like, comprehensive, and commendably brief address. Having made the usual and necessary reference to the progress of pharmacy, and testified to the improvements resulting from reporting the Council meetings, Mr. Haselden proceeded to the examinations. He referred to the opinion entertained by some that the chances of passing are in favour of those who have attended the lectures and laboratory in Bloomsbury-square, and most emphatically contradicted it. As a rule the examiners know nothing of the antecedents of the candidates; on the contrary, it is somewhat notorious that young men from the provinces, who have never attended the lectures in London, and students from other schools, have been, numerically, the most successful in passing. With regard to the Preliminary Examination, the President thought it would be well to appoint certain towns as centres, where the writing of the papers should take place, and if required, that a member either of the London or Scotch board should be sent to superintend. He wished he could report upon improvement in the answers furnished by candidates.

After alluding to early closing and prices for drugs, Mr. Haselden complimented the provincial associations on their prosperity, as evidenced by their few applications for aid. Whether this was intended to be taken seriously or not, we are unable to say. The merry little jaunt of the President, vice-President, Secretary, etc., to Edinburgh and Glasgow was alluded to, and after a tribute to the memory of Messrs. Waugh and Garle, the subject of the day, the woman question, was arrived at. Mr. Haselden very properly pointed out that the question was *not* whether females should be admitted to lectures and examinations, but simply whether, these having been passed, they should be allowed to become associates and members.

Mr. Haselden concluded his address with a farewell, the pathos of which was diminished by the intimation that it might not be for ever, and by their warm applause the members testified their appreciation of Mr. Haselden's long services, and not less of the delicately honourable feeling which had prompted him to resign.

The Council's report was next brought forward, and seeing that it was in the hands of all the members, it was taken as read.

Mr. J. D. DAVIS, of Kilburn, and Mr. F. M. RIMMINGTON, of Bradford, respectively moved and seconded the adoption of the Report with the least possible expenditure of words.

These preliminaries having been got through, the country members, according to custom, had their innings, and first at the wicket appeared Mr. Atkinson Pickering, of Hull. Mr. Pickering is exactly what the French describe as a *moulin de paroles*. His enumeration of pharmaceutical grievances came forth with a steady and continuous flow, and only his own mercy, apparently, prevented him from occupying the whole of the afternoon. His discourse marched leisurely along from one subject to another, and his conclusion was rather a voluntary reining up than the

close of his thoughts. But Mr. Pickering made several good points, and set some useful ideas afloat for the future speakers. He remarked, first, that the financial statement was too concise. But why he should suppose that it did not indicate the Society's surplus income was not very clear. It certainly appears to, and if it does not, the auditors are very seriously to blame. He commented on the serious loss by the lectures, and asked why the lectures should lose nearly £500 a year, while the laboratory showed a profit. Loud cheering from country members greeted the ironical reference to the magnanimous grant of £10, which, out of an income of £10,000, the Council had last year devoted to the furtherance of provincial education. Then Mr. Pickering wandered into a labyrinth of complaints about grocers and others selling drugs, a condition of things for which he clearly assumed the Pharmaceutical Council was responsible. He thought there would be but little difficulty in getting an Act of Parliament to confine the sale of all articles named in the British Pharmacopœia—with a few exceptions, such as raisins, etc.—to registered chemists and druggists. The prospect is tempting, but its realization, we fear, will occupy the Parliamentary Committee many long years.

Mr. MELLIN, of Wimbledon, put the argument used by the wicked grocers who sell drugs, and left it to be inferred that there was some reason in it. They ask, Why should we not sell citrate of magnesia and Epsom salts, if you sell tea and coffee, paints and pickles?

Mr. RICHARDSON, of Leicester, next lifted up his voice, and the burden of his complaint was the *Journal*. He thought the articles were lacking in vigour, and he instanced especially the gentle manner in which the attacks on druggists made by the *Globe* and the *Lancet* had been repulsed. He wanted more leading articles, and he also suggested, but was supported by no applause in that matter, the publication of the professors' lectures in the pages of the *Journal*.

The next speaker was Mr. REID, of Aberdeen, who spoke forcibly, and made a dashing onslaught on the Council in regard to the matter of provincial education generally, with especial regard to his own city, Aberdeen. He told how the Aberdeen chemists had exerted themselves to provide instruction classes, etc.; and had succeeded. But hearing that there was some money in London to be had for the asking, they made an application to the Council for £25. After a delay of several months, they got a document down from London with a long string of questions, and ultimately they were offered a loan of £10 for three years. The speaker freely acknowledged that it was highly important that the Council should be careful in spending money, but he thought country members would not for ever tolerate the system of hundreds and thousands of pounds being spent on education in London while they (the country members) were actually starving.

Mr. Reid's rather sensational speech was warmly cheered by the meeting, but was slightly disconcerting to the Council. The Vice-President (Mr. Brown), however, at a later period of the meeting, having armed himself with all necessary documents, replied to Mr. Reid's attack very successfully. He stated that the original application was for £25 for apparatus, etc., and £20 a year for paying lecturers. Provincial education on such a grand scale as this seems to have somewhat startled the Council, and in fairness to other towns, they did not see how they could accede to the Aberdeen Society's request. After consideration, therefore, the Educational Committee offered a grant of £10. Considering that there had never been more than twenty members at Aberdeen, and that this number had now fallen to twelve, this offer he thought was as handsome as Aberdeen could fairly expect. It was, however, refused. Eighteen months afterwards another application was made. The same old cheque was offered again, and again rejected.

Mr. REID took off the edge of this reply by showing that if Aberdeen itself only sent up to the Society from twelve to twenty pounds a year, it was the centre of a large district which contributed some hundreds of pounds annually. The Aberdeen chemists had spent out of their own pockets four or five times as much as they had asked the Society for. He persisted in regarding the offer of £10 as a loan, as it was expressly stated that it was for chemical apparatus redeemable at the end of three years. He thought the great mistake was the search for a universally acceptable

scheme. Let each case be judged on its merits, and when an application is made let the Council as business men make proper investigation into the requirements of the place and then give what they can afford. The grant might be continued or withdrawn at the end of twelve months, as circumstances should dictate.

Mr. BROWN again pointed out that the £10 grant could not be fairly described as a loan. The Society retained its claim on the apparatus for a period of three years, for the reason that provincial associations had sometimes but a very ephemeral existence, and in such cases it was right that the apparatus should be returned.

Mr. VIZER followed Mr. Reid, and commented on several subjects referred to in the Report. He claimed the credit of the variety of shades of opinion in the Council referred to in the report, for the Defence Association. By a series of figures, which the meeting did not very clearly follow, he showed some errors as to the increase of members mentioned in the Report. No explanation of the discrepancies was vouchsafed either then or afterwards, and Mr. Vizer passed on to the Benevolent Fund. He objected strongly to the principle of paying annuities out of income, and proceeded to compare the Pharmaceutical Benevolent Fund with the Pastoral Aid, and other religious societies' funds. This rather tried the patience of the meeting, and Mr. Vizer came to a conclusion.

Mr. MUMBY, of Gosport, complained that the Council was not ready enough to prosecute offenders for infringements of the Pharmacy Act, and in support of this remark he referred to a case in his own neighbourhood. Later on the society's solicitor (Mr. Flux) replied to this criticism rather effectively. He explained how extremely difficult it was to obtain a connected chain of evidence in places a long way off, for the reason that gentlemen who gave the information, almost invariably stipulated that their names should not be mentioned in the matter. In the particular case referred to by Mr. Mumby, he believed they had now got sufficient evidence. "It is very easy," Mr. Flux said, "to get convictions for selling poisons, if gentlemen would only take the matter into their own hands. They must be able to prove the purchase of a poison, and then to prove that the article bought really contained the poison represented. With such evidence, he believed, there was no reluctance on the part of the Council to take proceedings, although the Council's duty was rather to point out how the prosecution was to be carried out, than to undertake it. The Society alone had power to proceed with regard to infractions of the Register."

Mr. FRAZER, of Glasgow, explained what had been done in Scotland, in the way of convicting unregistered dealers in poison. Acting under the instructions of Mr. Flux, they sent messengers with some old prescriptions containing poison, and had them dispensed. At this point some very fine points of ethics were discussed for a few moments. Mr. Frazer, who supplied the old prescriptions, said he had been asked to put the stamp of his firm on some "dummy" prescriptions, but Frazer and Green never stamped prescriptions which they had not dispensed. The old genuine ones which he had supplied were stamped by many firms—such as Bell and Co.—At this point Mr. HILLS interrupted with the remark that Bell and Co. never stamped prescriptions at all, to which Mr. Frazer promptly retorted that they ought to do so. Mr. GILES, who is always quick to see the smallest vulnerable space in a friend's morality, said he would be very sorry himself to take part in any action similar to that which the Excise officers indulged in for the purpose of catching offenders. He would go straight to the man he intended to prosecute, and inform him that unless he desisted from his practices, he should take means of tripping him up. The speaker had rather too readily assumed that the Glasgow gentlemen were lower than himself in their notions of honour, but Mr. Frazer responded that warnings had been repeatedly sent to the men who were afterwards convicted.

Mr. BOSTOCK, of Ashton, asked for evening classes for the young men from the country, who came to situations in London. It is to be hoped that Mr. Bostock is right in his generous assumption that there are many young pharmacists in the metropolis who are pining for Bloomsbury-square evening classes.

Mr. WILKINSON, of Manchester, commenced a speech on

the new regulations about examinations, but at Mr. Brown's suggestion deferred his remarks till the special meeting, and from that postponed them *sine die*.

Mr. HUMPHREY, with his usual force, and with much oratorical gesture, expressed at some length his perfect satisfaction with everything pharmaceutical existing.

Mr. HURSTWICK asked for more evening meetings. Mr. Atkins, of Salisbury, Mr. Randall, of Southampton, and Mr. Sutton, of Norwich, spoke briefly on educational matters. Mr. Sutton's was a model speech, occupying about two minutes in delivery, but saying a good deal. In regard to getting grants, he said the difficulty was not to get them, but to know what to do with the money when obtained. His experience of young men was that they did not want elaborate courses of study, but just enough instruction to squeeze them through the examinations. How was the Council to help those who would not help themselves?

Mr. SCHACHT, on behalf of the Council, expressed the pleasure they all felt in being criticised, and explained the misfortunes which had attended the incubation of any Provincial Education Scheme. They could not proceed unless they could get co-operation and general approval for some scheme, and this had not been met with. For his own part he found nothing in the Report so unsatisfactory as the fact that they had funded £2,300.

In the midst of the education speeches, Mr. WHEELER interpellated a question as to the co-operative stores. It was not referred to in the Report, so he should like to ask if anything had been done, and whether it was within their knowledge that prescriptions were actually dispensed at the Civil Service Stores in the Haymarket, containing Scheele's prussic acid. The PRESIDENT said, the question had been under consideration, and he himself took a very prominent part in bringing it forward; but he was not supported to such an appreciable extent by chemists outside, or by the members of the Council, to carry on any action against these stores. Otherwise he should have done so very willingly. He believed that if any action was to be taken, there must be a more decided feeling manifested by the trade at large, so that it should be done in their names, rather than in that of the Council.

This concluded the first part of the day's entertainment, and then came the discussion as to pharmaceutical female's rights. Mr. Hampson took the floor and moved:—

"That inasmuch as the Examiners of the Pharmaceutical Society are empowered by law to test the qualifications of persons—*female as well as male*—before the State permits them to be registered as persons fitted to 'keep open shop' to practise pharmacy, and as all persons having passed the Major and Minor Examinations are eligible for admission into the Society, as members and associates, that they may exercise control and direction over the working of the Pharmaceutical Society, and have the benefit of its associative influence and protection, this meeting is of opinion that it is contrary to the plain intention of the statutes to refuse admission to female persons, who having conformed to the legal tests of the Examiners and the regulations of the Society, may desire to become connected with the Pharmaceutical Society in the capacity of apprentices or students, or associates, or members."

In advocating his resolution, Mr. Hampson very properly avoided the little jokes with which some of the after speakers sought to enliven the discussion, and addressed himself to the question whether the Society had any moral or legal right to keep women out, when they had fulfilled all requirements. He thought the editor of the *Pharmaceutical Journal* had overstepped his duty by introducing into its pages a political article likely to bias the discussion. Having quoted passages from the Pharmacy Acts of 1852 and 1868, and also from the Society's bye-laws; Mr. Hampson referred to Lord Brougham's Act (13 and 14 Vic. sect. 4) "that all words importing the masculine gender shall include the feminine unless there be an express provision to the contrary." Mr. Hampson next attempted to combat the notion that the Pharmaceutical Society was a merely private society. This statement he thought fallacious. It had been a private society, but now it was entrusted with public duties and public powers, and he had little doubt that

if they refused to elect a class of *men* the Government would step in and say they were using their power badly. They could not prevent women from becoming chemists if they (the women) chose it. Why, therefore, should they be prevented from entering the Society? There were over two millions of women in this country earning an independent livelihood, and it was neither just nor fair to close the Pharmaceutical Society to any who should choose pharmacy as their profession. Finally, if it should happen that any women should in the future become distinguished as pharmacists, it would be an honour rather than a dishonour to have them as members of their Society.

Mr. BOSTOCK, of Ashton, seconded Mr. Hampson's motion in a temperate speech, using similar arguments to those of the mover.

The cheers which greeted the mover and seconder of this motion were so feeble that its doom was evident even at this stage of the discussion. There were plenty of speakers ready to oppose, but Mr. PICKERING obtained the hearing first, and moved, as an amendment—"That the question of admitting ladies as members, associates, apprentices, or students be adjourned *sine die*." Mr. Pickering began by asserting that the question was—Was it desirable that women should occupy the position of pharmaceutical chemists? This erroneous idea of the question at issue ran through the speeches of most of the debaters, and formed the staple of their remarks. Mr. Pickering was proceeding to comment on women's capacities and powers generally, when he was stopped by general cries of "question," and by the Chairman's *fiat*. He therefore left his amendment with the meeting, and some long time after it was seconded by Mr. Marston. The women's advocates got the floor, and Mr. FRAZER, Mr. BOOTH, and Mr. RANDALL spoke in succession.

Mr. FRAZER and Mr. BOOTH both argued outside the question, their remarks tending to prove—the first that the trade was fit for women, and the latter arguing, from his wife's abilities, that women were fit for the trade.

Mr. RANDALL came very directly to the point, however. He argued in this way:—Some time ago the trade was divided between pharmaceutical chemists and chemists and druggists, and chemists and druggists claimed to be on the register. When that was conceded they said it was unfair, because they had only taken the first step, that they should be kept out from any share in the government of the Society, and then it was admitted that they must come in and be admitted to membership. At that time there was a little suspicion as to what might be the result, and it was asked whether they could insist upon coming in, or whether they might not be rejected by the Council by a sort of side-wind. He remembered very well at the time it was stated as a legal opinion that though the Council might exclude individuals on account of some individual incapacity, they could not keep out a class or a large section, for that if they attempted to do so a *mandamus* would issue compelling them to elect. Now it appeared to him that women were exactly in that position; they had been admitted as pharmaceutical chemists, and it was now too late to keep them out of the Society. He would ask the solicitor to say why, if he had correctly stated what passed on the previous occasion, a *mandamus* would not lie in the same way on the part of those women who were refused admission. It seemed to him simply a question whether they would do it spontaneously or be compelled to do it.

Next came Mr. SANDFORD, who, as the acknowledged champion of the existing order, and this time in accord with the sentiments of the majority, was received with tumultuous cheering. Mr. Sandford first endeavoured to combat Mr. Randall's argument. His idea was that women though eligible were disqualified for the reason that they were women. This was the alpha and omega of Mr. Sandford's position. But he brought the meeting to a climax of hilarity by producing a copy of *Punch*, containing a picture representing Mrs. Dr. Mandragora Nightshade, whom a servant-maid mistakes for a man in woman's clothes. There was no mistaking the popular feeling when so dull a joke as that could fill the theatre with ringing shouts of laughter. Such was the case, however, and though Mr. Hampson challenged the appositeness of such illustrations as these, the President made no attempt to keep his predecessor on the rails. The final point of Mr. Sandford's

speech was to suggest that women who wanted to come into the Society might go to the Court of Queen's Bench for a *mandamus*. This he urged quite as much in the interest of women themselves, as for the sake of the Society.

Mr. GILES followed, and made a judicially impartial speech, facing both ways. He urged that it was not the business of the Society to adjudicate on the sentiments of others, and he deprecated the settlement of this question either by chivalrous feelings or by jealousy. He doubted very much whether having admitted women to the lectures they could legally refuse them admission to the Society. Notwithstanding his arguments, however, Mr. Giles himself illustrated his opening remarks by deciding to let his sentiments override his reason and keeping women out of the Society until they could get a *mandamus* from the Court of Queen's Bench.

Mr. SAVAGE then argued for the women, and Mr. HUMPAGE against them. The solicitor (Mr. FLUX) followed, and stated his impression which had not yet crystallized into an opinion, that if ladies went to the Court of Queen's Bench for a *mandamus* they would not be successful. He believed the law would justify the Pharmaceutical Society in excluding women from membership, just as would be the case in a club. Referring to Brougham's Act, which had been quoted, Mr. Flux said it was true that the masculine gender was held to include the feminine, except "when the context was repugnant thereto." This case he thought would come within that exception. He reminded the meeting how that when the last Reform Act was passed, the advocates of women's rights had gone to the Court relying on this same Brougham's Act, and had been defeated. He (the speaker) believed the cases to be very parallel. In the Society's charter, too, *widows* and *orphans* were referred to, but no allusion was made to *widower*, and this he thought indicated that there was no original intention to admit women to membership. In reply to Mr. HILLS, the solicitor said that if ladies were admitted, it would be open to any gentleman to go to the Court for a *mandamus* calling on the Society to show cause why they had been admitted. Mr. HILLS announced that he should vote in favour of the proposition.

Mr. SCHACHT was the next speaker, and he, as he has done on the Council, advocated the admission of women. He urged this as a matter of justice, but added that if there were any doubt as to the justice of the case, generosity should lead them to give way. The speaker occasioned some amusement by naively intimating an assurance that this generosity might be exercised without much danger, as only two or three at the most were likely to become members. In reference to the solicitor's remarks, Mr. Schacht said he apprehended it was open to any one to go to the Court for a *mandamus* calling on the Society to show why they had admitted anyone else. He thought the ladies would have a good *locus standi* if they applied for a *mandamus*.

By this time the meeting had become very impatient for a division, and listened with no good grace to Mr. BETTY against, Mr. BURDEN and Mr. URWICK for the motion, and Mr. ATKINS neutral.

Mr. HAMPSON was allowed to reply, which he did very briefly, and then the PRESIDENT put the amendment. The decision was a foregone conclusion, although by far the greater portion of the speaking had come from the minority. The hands held up for the amendment were probably three times as many as those who opposed it, and the few enthusiasts who called for a division were forgotten amid the triumphant cheers which greeted the result. When the amendment was put as an original motion, Mr. RANDALL moved to omit the words "*sine die*" and substitute "for the purpose of obtaining counsel's opinion on the point." After some little discussion another division ensued with no variation in the result, and finally Mr. Pickering's motion was carried.

THE PHILOSOPHY OF DISINFECTANTS.—In a late issue of the *Philadelphia Medical Times*, there is a report of a student undergoing his examination, who, when requested to describe the *modus operandi* of disinfectants, replied,—"They smell so badly that the people open the windows, and the fresh air gets in."

SPECIAL MEETING OF THE PHARMACEUTICAL SOCIETY.

AFTER the general annual meeting, a special meeting was held to discuss certain alterations in the bye-laws, chiefly those affecting examinations which had been proposed by the Board of Examiners and accepted by the Council. Most of these were merely proposed in order to promote the convenience of the arrangements for the examinations. They also included the changes which the Council had decided on in reference to the Minor and Major Examinations, and lastly it was proposed that:—

"After the 31st day of December, 1874, no person shall be admitted to the Major or the Minor Examination who shall not have attained the full age of twenty-one years; and after the 31st day of December, 1876, no person shall be allowed to pass the Major or the Minor Examination unless he shall satisfy the examiners that for three years he has been registered and employed as an apprentice or student, or has otherwise for three years been practically engaged in the translation and dispensing of prescriptions."

The meeting was now asked to confirm these proposals.

With respect to the last of them, Mr. Hampson raised a discussion. He affirmed that the proposal was in direct contravention of the provisions of the Pharmacy Act, which empowered and required the examiners to examine all such persons as shall tender themselves for the examination under the provisions of that Act. He asserted that the Society's own solicitor had stated before the Parliamentary Committee that such a bye-law would not be legal. To bring about such regulations it would be necessary to go to Parliament for further powers. He had also obtained an independent legal opinion to the same effect. And he argued, too, that it was particularly undesirable to draw these hard-and-fast lines, for the reason that cases might occur where the requirement to serve three years in a chemists' shop between the Preliminary and the Minor Examinations might be inconvenient, and also that the examination was of such a character that the examiners could tell whether a young man knew his business practically or not, without demanding from him a certificate of three years' service. He thought that if such regulations were desirable, they ought to go straightforwardly to Parliament and obtain a modification of the statute. He therefore moved to omit this new clause. Mr. Urwick seconded the amendment.

Mr. CARTEIGHE spoke in favour of the proposal. He first of all animadverted on the tactics of bringing forward in public what had been said in a private committee meeting. He spoke somewhat depreciatingly of outside legal opinions, which he intimated could be got to order, and he presumed the Council had consulted their own legal officer. But his main argument was that it was impossible for the examiners under present circumstances accurately to test a man's practical knowledge of his business. Men would actually make up difficult emulsions, pills, and even silver them, and get a certificate, who still did not know their business; and the examiners felt they had no right to give certificates unless they carried—that they should carry—a certain amount of money value, and be a guarantee that every man who passed the Minor Examination might be considered reasonably competent. It often happened now that employers would say to assistants, We do not care so much about the Minor Examinations; where have you been?—they each wanted some test of practical knowledge. If the examiner devoted two hours to every candidate, in ninety-nine cases out of a hundred he would be able to pass an accurate judgment; but for that purpose they would require an enormous increase in the number of examiners, or the duties would be so heavy that no one would undertake them. The proposed alteration was asked for in the interest of the candidates themselves, in order that they might have ample opportunity to digest their knowledge, and so be better prepared to pass creditably. The great fault of the present system was, that many men got up their scientific knowledge too quickly, and while they came up thoroughly prepared in chemistry and botany, they often failed in a practical subject, because of some little technical matter which experience only could have made them familiar with. If such men had waited a little longer they would have passed with credit. Any man who was competent to

pass under twenty-one should be infinitely more competent at that age; there could be no question of that. They did not want to force on any bye-law, but simply, in accordance with the often-expressed wishes of the members, to make the examinations more practical. Men might be, and he believed were, prepared for the examination who had never been in a chemist's shop at all. They wanted men having an honest, *bonâ fide*, practical knowledge of the various subjects.

Mr. ANDREWS supported the proposed bye-law, and Mr. MELLIN opposed it.

Mr. GILES would vote with the Council, but he could see that there were objections. He did not attach much weight to the legal question, because after all they could do pretty much as they liked until they were disturbed. Young men ought to be permitted to pass their examination when most convenient to themselves. He quite agreed that no one under twenty-one ought to be allowed to open a shop and carry on business, but that was quite a different question, and might be settled in quite another manner. After a few more remarks from other speakers, the amendment was put to the meeting and lost, only eight hands being held up for it. The original motion was next put, and carried. The new proposal is therefore decided upon.

PHARMACEUTICAL DINNER AT THE CRYSTAL PALACE.

FOR the second time members and friends of the Pharmaceutical Society met at the Crystal Palace to dinner, on the evening of May 20th—the day before the annual meeting. The attendance was considerably in advance of last year, the number actually sitting down to dinner being 275. Among these were some twenty members of the medical profession, and an excellent representation of the wholesale trade. Among the physicians we noticed Dr. Richard Quain, Dr. Langdon Down, Dr. Ramsey, Dr. Steele, Dr. Leared and others.

After the dinner Mr. Haselden took the chair, and some short speeches ensued. The president proposed "The Queen," and after that toast had been honoured came "The health of the Prince and Princess of Wales, and the rest of the Royal Family." Mr. W. S. Brown (vice-president) then proposed "The Medical Profession." By dint of great exertion Mr. Brown made himself heard in most parts of the room, and, perhaps, he was the only speaker successful in that respect.

If, he said, gratitude consisted in "a lively expectation of favours to come," in no assembly could the toast which had been entrusted to him meet with a more ready or hearty reception than in that which he was addressing. Years ago Shakespeare described, in language probably familiar to all, a very useful body of men, and no doubt his words were appropriate at the time; but certainly, looking around him, he did not think they were quite so apt in the nineteenth century. Their obligations to the medical profession began with the earliest period of their existence, and in after years few, indeed, were so fortunate as not to be in a position to recall circumstances in which some member of the medical profession had interposed between them and the king of terrors a shield which, at any rate for a time, turned aside his darts; and when the last inevitable time arrived, it was one of the solaces of human existence to know that we should then receive all the alleviation of our condition which medical skill and benevolence could bestow. The medical profession was a truly noble one, and well had it maintained its character in this country. He need not recapitulate the great names which had adorned its annals in the past, and it would be invidious to mention only a few of those who adorned the present era; nor was it necessary to do so, as they were especially familiar to such an audience. Speaking as a country member of the Council, he was proud to be able to say that every year showed that a better and more cordial understanding was springing up between the medical profession and that body to which he had for many years had the honour to belong. He sincerely hoped that such cordiality would continue to increase, and that it would be fostered and encouraged by such meetings as the

present. He begged to couple with the toast the name of Dr. Quain.

Dr. QUAIN, in returning thanks, said he felt it difficult to adequately acknowledge the very cordial welcome which the toast so eloquently proposed by Mr. Brown had secured. He rejoiced to think that the feeling of jealousy that once existed between their bodies was passing away. This he attributed to a better understanding of the functions and duties of the members of those bodies, and to a better and higher education, both of the members of the medical profession and of pharmacists. It was not difficult to remember the time when the practice of medicine consisted of the study of a few symptoms, of feeling the pulse, looking at the tongue, and prescribing a certain quantity of physic, more profitable, perhaps, to the practitioner than to the patient. Now, however, by the aid of physical science, the phenomena of life in health and disease were closely scrutinized. The stethoscope, the ophthalmoscope, the laryngoscope, the test glass, and the crueible were made use of, and thus an accuracy of diagnosis never previously dreamed of was obtained. So, too, with regard to pathology; by the aid of the microscope and its appliances, an immense advance in our knowledge of the nature of diseased processes had been made. There was still one branch in which there was great room for progress, viz., the treatment of disease. We want a better knowledge of therapeutics; and as therapeutical success must depend on the character of the agents used, we must look to pharmacists for help in this respect. This is the return we must ask for the favours to which Mr. Brown had alluded. He rejoiced to see the successful efforts which had been made in the promotion of education by the pharmaceutical body. These efforts may be traced in the character of their Preliminary, their Minor and Major examinations, and the result may be recognised in the published proceedings of their Council, their evening and other meetings, which afforded evidence of rare judgment, intelligence and scientific knowledge. In wishing prosperity to the Pharmaceutical Society, he begged to connect the toast with the name of their present President, Mr. Haselden, the last of a list of distinguished names. He referred to the names of William Allen, Jacob Bell, John Savory, Peter Squire, Henry Deane, Thomas Morson, George Sandford, and others, who had rendered, each in his own way, valuable service to the Society and to pharmaceutical science,—of these gentlemen the present President was a worthy and successful follower. He saw a great future for the Society, for he saw in so large a body of educated men throughout the country, valuable allies of the medical profession, and he wished them all success.

The PRESIDENT begged to thank Dr. Quain, personally and on behalf of the Society, for the kind manner in which he had proposed the toast, and the company for the way in which they had received it. He was also grateful to the medical profession for the support which had been accorded by it thirty years ago, in the early days of the Society, not only morally but practically, by giving lectures freely and spontaneously, for which the Society had at that time made no settled provision. The advantages of the Society, of the education it bestowed, of the evening meetings, of the conferences, of such social gatherings as the present, and the conversation, were obvious to all, and did not require to be more especially mentioned. Although he took no credit to himself for the establishment of this dinner, yet he felt greatly pleased that it had been established while he occupied the presidential chair.

Mr. T. H. HILLS proposed "The North British Branch of the Pharmaceutical Society." He alluded especially to a few names prominent in their endeavours to promote the objects of the Society in Scotland—Mr. Macfarlan, Mr. Mackay, and Mr. Frazer. Of Mr. Macfarlan, who was gone from them, he need only say, Peace be with his memory. Mr. Frazer also was most active in carrying out the best interests of the Society, and he regretted his absence that night. He also deeply regretted the absence of Mr. Mackay in consequence of domestic affliction, but he would take the opportunity thus afforded him to speak with more freedom of the great services rendered by Mr. Mackay for so many years as Honorary Secretary of the North British Branch. It was no exaggeration to say that John Mackay had done in Scotland what Jacob Bell had done here. However, there was a most worthy representative from Scotland in

the room, Mr. Baildon, who had always taken the greatest interest in the Pharmaceutical Society, and therefore he begged to couple with the toast of "The North British Branch of the Pharmaceutical Society" the name of their esteemed friend, Mr. Baildon.

Mr. BAILDON acknowledged the compliment.

Mr. BETTY proposed "The British Pharmaceutical Conference." It was not, he said, and never was, an association exclusively of the Pharmaceutical Society, of any division of the United Kingdom, nor even of a continent: it had formed a bond of brotherhood between thinking labourers in science. It might be said to have stepped forth, like Minerva from the brain of Jove, equipped for its task as the champion to do battle for the intellectual life of present and future pharmacy. The officers of the association included in their number some of the most illustrious names which adorned the ranks of pharmacy; but time only allowed of mentioning Mr. Brady, the present President, who, he regretted to say, was not present that evening. So long as addresses such as he and his predecessors had delivered were continued at the annual meetings, so long would the interest of the Conference be sustained, and of this he had no fear. He begged to couple with the toast the name of one of the officers of the Society, who had so zealously and with such talent laboured to place the Conference in the position it now held—the Secretary, Professor Attfield.

Professor ATTFIELD thanked those present for their generous wishes for the success of the Conference, and acknowledged the compliment paid him by the association of his name with the toast. Every one of the present and past officers, he would venture to say, had been actuated by two motives—first to encourage an onward march into the untrodden regions of pharmaceutical research, and next to foster friendly feelings amongst pharmacists, and it was pleasing to know that very great success had resulted. But this state of prosperity was only in part due to the efforts of the officers. They must not forget the twenty pioneers who first cleared the way for the Conference ten years ago on the banks of the Tyne, nor the two hundred who enrolled themselves under its banners at the first annual meeting at Bath, nor yet the six hundred who joined its ranks in the ensuing years, before anything so tangible as the "Year-Book" could be offered in return for support. Nor must the authors of papers be forgotten, for without them the annual meetings could not be carried on. Much of their success was also due to the labours of the local officers of the Conference in the towns where it held its meetings, and acknowledgment must also be made of the encouragement they had always received from kindred associations, especially from the Council and leading members of the Pharmaceutical Society of Great Britain, and the pharmaceutical press both of Europe and America. To these things as well as to the energies of the executive must be attributed the fact that their numbers had increased from twenty to twenty hundreds. As to the future success of the Conference he did not believe there was a gentleman present who felt the least doubtful on that point. The influences which had brought it to its present position were as vigorous as ever, if not more so. Any difficulties which might be met with by members in carrying out expensive researches were removed by the munificence of a gentleman whose name he need not mention, who had lately given the association £200 with which to aid original workers. Lastly, with reference to general support, he would say that the officers of the Conference would never rest satisfied until they knew that their annual volume, the "Year Book," was to be found on the shelves of every pharmacy in the British Empire.

Dr. RAMSEY proposed the health of the Stewards, which was briefly acknowledged by Mr. Carteighe, and this concluded the list of toasts, the remainder of the evening being devoted to friendly conversation.

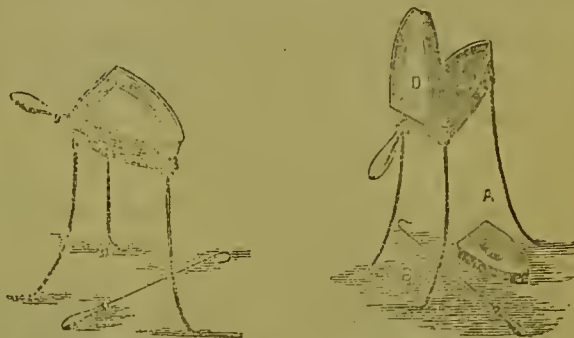
The band of the Guards, under the direction of Mr. Dan Godfrey, played at intervals during the evening.

AN old lady said to her sons: "Boys, don't you ever spekerlate or wait for something to turn up. You might as well go and sit down on a stone in the middle of a medder, with a pail twixt your legs, and wait for a cow to back up to you to be milked."



CALVERT'S CARBOLIC VAPORIZER.

WHENEVER it is desirable to thoroughly fill any chamber, shed, stable, or other place with the vapour of carbolic acid, the new apparatus designed and constructed by Messrs. Calvert and Co., of Manchester, will be found a most ready and satisfactory appliance. It consists, as the engraving shows, of a tripod stand, on the top of which and fixed on



it is the iron-box. The iron A has to be heated in the fire and dropped into the box. When shut down the lid forms an excellent shallow evaporating dish, with an enamelled surface. The rapidity of the evaporation of course depends on the heat of the iron. But if the latter is red-hot it will fill a good-sized room with vapour in a very few minutes. The retail price of this apparatus is to be fifteen shillings. We should judge that in hospitals and in places where large numbers of people congregate, the occasional employment of this apparatus will be very useful.

MINIATURE WATER BATH.

A VALUABLE little addition to the dispensing counter has been introduced by Messrs. Lynch and Co. It is a very small water bath about 2 inches or 2½ inches in diameter. An enamelled earthenware vessel is fixed into a tin case, and between them is a space for hot water. For pill masses, small quantities of ointments and many other occasional purposes this little invention will be found useful. It is sold very cheap.

Messrs. Lynch and Co. have also some novelties in syringes, especially ear syringes, well worth attention.

SILVER BLUE.

MR. GUSTAVE TOIRAY, of Hatton-garden, whose copying and other inks have acquired a high reputation, introduces an article called "Silver-blue," which is an excellent polishing material for silver and plated goods. It brings up a fine polish on such, and it may also be used for producing a silvery surface on bronze, etc. It is warranted to contain no mercury. This article is supplied in bottles varying from 6d. to 2s.

THE HINDOO PEN.

MESSRS. MACNIVEN AND CAMMERON, the indefatigable inventors of new pens, have just added another under the title we have quoted above to their assortment. The new comer is very curiously cut and is especially suitable for writers who form large characters and write with the side of the pen. It is an ally and not a rival of the pens which have made the reputation of this firm, and which they have designated under the titles of "Pickwick," "Owl," "Waverley," etc.

CHEMICAL SOCIETY.

Thursday, May 15th, 1873.

PROCEEDINGS of the Chemical Society, Dr. Odling, F.R.S., President, in the chair. When the formal business of the Society was terminated, Dr. H. S. Armstrong delivered a most able and comprehensive lecture on "Isomerism," pointing out that the generally received position theory was incompetent to explain many reactions which took place in the formation of metameric and isomeric substances. He suggested that the investigation of the thermal properties of compounds would establish facts which ought ultimately to enable us to obtain some insight into the matter. After a lengthened and animated discussion, the meeting was adjourned.

Thursday, June 5th, 1873.

Dr. Odling, F.R.S., President, in the chair. After the customary business was completed, six communications were read before the Society, the first being on the "Dioxides of Calcium and Strontium," by Sir John Conroy, Bart., M.A., in which the author gave the method of preparation and properties of these substances. Mr. T. Wells then described a new form of ozone generator which gives abundance of ozone, and has the advantage of being easily constructed, and not liable to be broken. The other papers, which contained but little of general interest, were entitled, "On the Behaviour of Acetamide with Sodium Alcohol," by W. N. Hartley; "On Iodine Monochloride," by J. B. Hannay; "On Triferrous Phosphide," by Dr. R. Schenk; and "On Sulphur Bromide," by J. B. Hannay. The meeting finally adjourned until Thursday, 19th June, for which the following memoirs are announced:—1. "On the Influence of Pressure upon Fermentation," Part II., by Horace Brown. 2. "Researches on the Action of the Copper-zinc Couple on Organic Bodies," III.; and "On Normal and Iso-propyl Iodides," by Dr. J. H. Gladstone and A. Tribe. 3. "On Cymenes from Different Sources Optically Considered," by Dr. J. H. Gladstone. 4. "On the Action of Bromine on Alizarine," by W. H. Perkin. 5. "On some Decompositions and Oxidation Products of Morphine and Codeine Derivatives," by E. L. Mayer and Dr. C. R. A. Wright. 6. On the Decomposition of Tricalcic Phosphate by Water," by R. Warrington. 7. "On a New Tellurium Mineral, with Notes on a Systematic Mineralogical Nomenclature," by J. B. Hannay. 8. "Communication from the Laboratory of the London Institution," No. XII. "On New Derivatives of Cresol," by Dr. H. E. Armstrong and C. L. Field.

THE Persian Balm, prepared by Mr. Lee, of Great Yarmouth, is very neatly turned out, and is said to "restore grey hair to its natural colour." There is no difficulty about that. because the natural colour of grey hair is grey. We will believe, however, that the Persian Balm has a higher virtue than is modestly claimed for it. The grey-beards on our staff decline to be experimented on.

Mr. J. WILFORD has succeeded Messrs. Judd Brothers, as oilmen, in Suffolk-street, Birmingham.

At the Birmingham Police-court, on the 6th ult., Messrs. Peyton and Son, vitriol merchants, were fined 30s., including costs, for having fifteen deficient weights on their premises.

ELEVATING THE STANDARD.

THOSE ultra-orthodox persons who seem to think that it is of far more importance that our young men should be recognised students of a quasi-official school, than that they should give tangible proof of possessing a practical knowledge of their business, may read with advantage the following somewhat striking extract from the *Nashville Medical Journal*:—

"Our friend of the *Medical Record* thinks it must be a very poor medical school which would not, in twenty years, turn out one or more who would afterwards work out for themselves a reputation that would not die with them. We dare say he is right in this; for it would be difficult to believe that a roadside public-house could exist prosperously for a score of years without enabling the landlord to show on his register, names whose owners had risen to celebrity after supping and lodging with him. But we think it extremely doubtful whether a landlord, in all the country round, would swallow metaphysics enough in a lifetime to attempt to establish the relation of cause and effect between his jug-tavern and that celebrity. Oh! no! Nobody but a doctor could do that.

"Let us be understood. There were great doctors before medical schools, and there have been great ones since, and in despite of them. We believe a medical school never made one great man, and never will, though they are helps and spring-boards in that direction. The new plan to force this unnatural relation, by adding to the name of the graduate the place where he was born into medicine, in the vain hope that mamma may help baby along, to say nothing of the palpable violation of our ethics it involves, is a laughable puerility. One signs himself P. Q. Z., M.D., Edin., and immediately there spring up, in the mind of the reader, winding rivers, tall, thin-clad trees, long grass, and abundance of sunshine and azure, with a couple of fig-leaf-aproned people, otherwise nude, of opposite sexes and desperately in love with each other. But unfortunately, Eden is spelled with an 'i,' and the picture vanishes. What can it mean? Why, it is intended to convey the idea that the owner of that name graduated at Edinburgh, Scotland—a weak parody upon 'Help me, Cassius, ere I sink.' Another writes 'Harv.' at the end of his name, to show that mamma is somebody, whatever may be thought of young hopeful. But the reader seeing 'Harv.' has his mind running on 'harvest home,' and is busy recalling its festivities with the English peasants in the time of Henry VIII. Then comes 'Jeff,' and 'Penn,' and 'Belle,' and 'Lou,' and 'Cin.,' and 'Nash,' and a whole Babel of jargon of thundering sound, signifying nothing—*non-sensine*. Graduate in medicine from our honoured University on yonder hill, rely on nothing under God but your own brave soul, with fixed determination of purpose to *deserve* distinction, and, if life lasts, it will perch upon the standard that *you*, not I, have raised. Here, as elsewhere, you must work out your own salvation.

"I plant my standard in the milky way,
Upon the very key-star of the arch,
And to my hesitating pupil say,
'Look ye steadfast, upward, and forward, march!'

"Let its bright silken streamers rustle there,
Amid the gems and glories of the sky.
While pointing to it, in that virgin air,
I ask opposers, 'How is that for high?'"

A COMPANY has been formed under the title of the Grocers' Supply Association, (Limited), the object of which is to enable grocers and those who deal in groceries, themselves to co-operate in their purchases, and thus to follow out the advice offered by Mr. Lowe, on the occasion of the anti-co-operative deputation last January. The plan is very simple, but at the same time very attractive. None but shareholders will be entitled to be customers of the company, and it is proposed to charge only a small profit on all transactions. At the end of the year the net profit thus accumulated will form the dividend. Therefore shareholders will have a double advantage. The Company has already entered into a contract with Messrs. Jones, Palmor and Co. (proprietors of the "Eastern" &c.), for the manufacture of their specialties, and if the business is worked with skill and energy, we think it will prove successful. We may add that fuller particulars concerning this new venture will be found in our advertisement columns.



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BEST AND CHEAPEST NATURAL MINERAL WATER OF VICHY, SPRING of ST. YORRE.

N. LARBAND, PROPRIETOR.

Approved by the Paris National Academy of Medicine, and bottled under Government control.

"The water of the spring of St. Yorre is used as a drink. It is the coldest, contains the most mineral properties, is the most effervescent, and the least affected in transit of all the springs of Vichy. The water of this spring is the best suited for exportation."—Dr. Armand Rotureau (*History of the Principal Mineral Waters of Europe*, page 370).

SOLE AGENTS FOR THE UNITED KINGDOM,
ERNEST MAGEN AND J. LAGRAVE,
19, UPPER BERKELEY STREET WEST,
HYDE PARK SQUARE, LONDON.

AGENTS WANTED IN EVERY TOWN.

POROUS BATTERY CELLS OF SUPERIOR QUALITY. PATENT PLUMBAGO CRUCIBLE COMPANY,

Sole Makers of Morgen's Patent Crucibles,
BATTERSEA WORKS, LONDON, S.W.

DOMESTIC FILTRATION.

"WITH regard to the Silicated Carbon Filters, I have made many experiments upon them, and have been astonished at the energy and rapidity of their action. I passed through a small Filter of this make some of the worst description of water supplied by the London Water Companies, and found it, after filtration, to have become as pure as the very best London water. My experiments show that the Filter exercises a decomposing action—a chemical action—on the Organic Impurities in Drinking Water. I have no doubt that Water, which is dangerous from the Organic Matter contained in it, becomes safe on passing through the Silicated Carbon Filter. A point of some importance, shown by my experiments, is that a Second Filtration still further improves the quality of Drinking Water. After being in use for a considerable period, Filters lose their power and require renovation. I have found that the passage of a little Hot Water through the Silicated Carbon Filter, and afterwards blowing a little air through it, restores its power."

J. ALFRED WANKLYN, M.R.C.S., London,
Formerly Professor of Chemistry in the London Institution;
Joint Author of a Book on Water Analysis, and of the Ammonia Process.

PURE LINI FARINA.—A NOVELTY.

DRUGGISTS are respectfully invited to make trial of our real LINI FARINA, a pure Flour of Linseed, prepared free from Husk, by a new process, by

ROBERT LOCKHART, JUN., & Co.

WAVERLEY OIL MILLS, EDINBURGH, AND 146, ST. VINCENT ST., GLASGOW.

Samples and prices on application.

RENDALL'S THEOBROMINE,

OR

CONCENTRATED COCOA.

THE purity and excellence of this Cocoa is obtaining for it an increasing demand.

Sold by most respectable Chemists in 1s., 2s., 3s. 9d., and 7s. 6d. tins.

To be obtained through the Wholesale Houses, or direct from the Proprietor,

J. M. RENDALL,

28, QUEEN STREET, EXETER.

"They come as a boon and a blessing to men."

The Pickwick, the Owl, and the Waverley Pen."

OXFORD UNIVERSITY HERALD says—

These Pens have been aptly termed by a contemporary the



WONDER OF THE AGE.

Sold everywhere. 1s. per Box. Sample Box by Post, 1s. 1d.

Shippers supplied by the Patentees,

MACNIVEN & CAMERON, 23, Blair-st., Edinburgh.

NOTICE AND CAUTION.—MACNIVEN & CAMERON beg to intimate to the Trade that they have now ready for Sale their NEW PENS.

HINDOO PENS, Nos. 1, 2, and 3.

HINDOO BARREL PENS, Nos. 2 and 2.

The Trade is respectfully requested to inform us of anyone infringing our rights.

EDINBURGH, 23 to 33, Blair Street, 1st May, 1873.

VICHY WATER COMPANY,
27, MARGARET STREET, REGENT STREET,
LONDON.

General Depot for all Mineral Waters.

EARLY CLOSING.

THE earnest, but somewhat unsystematic efforts which well-intentioned gentlemen have made from time to time, in our trade as well as in others, to secure a few hours of freedom in the evening for those engaged in shops, have been rewarded as yet with only partial success. An "early closing" agitation in a provincial town, and as far as shops are concerned, generally finishes all the excitement it causes in about one season. When first started, the unanimity between the various shopkeepers of the fortunate district has been almost almost alarming; for a week or two the popularity of the Literary and Scientific Institution has taken a bound which promises little short of millennial results; French, German, classical and scientific classes spring up abundantly, and all promises well. But a month is the extent of this bright career, then the billiard-room takes the place of the Literary Institution, and theatres supplant class-rooms. An assistant's salary is soon absorbed in gay life, and by almost all parties a sense of relief is felt when the "early closing" fever has passed over. This

statement of affairs is not entirely a fancy sketch, and we bring it forward with no desire that it should have the slightest influence in checking the progress of the movement for reducing hours of labour to a reasonable extent. There is no doubt that the hours of business of chemists and druggists are, on the average, much too long. Hours of business ought to vary somewhat according to the nature of the work, and the character of the occupation in which a chemist or his assistant is engaged is just that which should abridge and not increase the length of time he is occupied at a stretch, although as a matter of fact at present his hours are longer than those of any other tradesman. We fully admit, therefore, that it is desirable if not imperative that something should be done, and the simple object of our first remarks is that in any organization or plan of action, the chief ultimate danger should not be lost sight of.

But we notice with considerable astonishment that some few of our readers, despairing of ever helping themselves in this matter, are ready to hail the advent of foreign aid in the shape of an Act of Parliament. Several letters have been addressed to us, and one or two have appeared elsewhere consequent upon our remarks last month respecting Sir John Lubbock's Shop Hours Regulation Bill. Now, if the tradesmen of this country are really desirous of legislative interference with their business arrangements, we are not aware that it is anybody's business to stand in the way. But the desire seems to us about as unwise as the wish of the trees of the field for a king. And some of the correspondence indicates a very slight apprehension of the tenour of the bill in question. The Shop Hours Regulation Bill would not in any degree ensure early closing. As far as evening hours are concerned it would simply prohibit the employment of females or assistants and apprentices under twenty-one after nine o'clock at night, and on Good Friday and Christmas Day. Proprietors of businesses themselves and their grown-up assistants might work all night for anything that this bill contains to the contrary. But the bill would require every shopkeeper to close entirely one afternoon of every week from and after two p.m. We are not inclined at this moment to discuss the wisdom or the practicability of a universal half-holiday once a week, but we may ask chemists and druggists, who two years ago so strenuously resisted the bare idea of "inspection," and "interference," how they would be likely to receive the visit of a policeman who should call to see that they put up their shutters according to law. There are plenty of relaxations which would cease to be recreations if enforced by the arm of the law. Good feeding is a pleasant occupation for most true Englishmen; but Britons would revolt from their dinners even if Sir John Lubbock and his friends should establish and regulate good dinners by Act of Parliament. The law creating the bank holidays must not be confounded with this proposed Act; because without such an enactment there could have been no such holidays for banks. But all other warehouses, offices, and shops which have so unanimously fallen in with the bank holiday arrangements have done so voluntarily. The Bank Holiday Act has never been looked upon as a compulsory law, because its compulsion consists merely in giving the necessary legal sanction to the closing of banks. Moreover, some sour Puritans who had the misfortune to see something of the streets of London on Whit-Monday, on which occasion the holiday was kept more universally than on any former occasion, rushed to the conclusion that four of such days of debauchery were quite enough for a civilized country. There is an ominous though perhaps a necessary clause in the Shop Hours Regulation Bill, exempting from its provisions "any

premises licensed for the sale of intoxicating liquors." This exception would, we fear, be only too rigidly observed.

Neither can this Shop Hours Regulation Bill be fairly likened to the Workshops Acts, of which it is an extension. These Acts were rendered necessary for the protection of women and children employed in large numbers in many factories, but they only passed because Parliament and the country recognised the humanity, if not the abstract justice, of helping those who were not able to help themselves. Only a very strong case would have got such Acts through a British House of Commons, because their spirit of interfering with the freedom of contract is *per se* opposed to English principles of law. But no one can imagine for a moment that there is any such ease forthcoming in regard to shops. It is not all ease and comfort, but there certainly is not despotism enough in the shops of this country, where women and young persons are employed, to justify the interference of Government.

So much for the Shop Hours Regulation Bill. It is put down for second reading on the 18th inst. We should judge that its chance of passing is extremely remote, and notwithstanding the letters of half-a-dozen correspondents, we believe there will be but few in our trade at least who will mourn its death.

But cannot something be done voluntarily to lighten somewhat the long tedious hours of a chemist's business, wearisome as they are to the body, ruinous to the mind? We often have the pleasure to announce some compact between the chemists of a district or a suburb to close at a certain hour. This is very good, but these compacts are troublesome to construct, and have but too often proved fragile. As we said at first, success in the early closing movement, as far as shops are concerned, has been as yet but very partial. The fact is that in this, as in all other social objects, men want leaders. And leaders must be bold, self-reliant, and patient. The chief house in every town can generally afford to close an hour earlier than has been its custom without waiting twelve months for a poor struggling brother to sign the compact. If such firms would take the initiative others would soon follow their example; it would be the correct thing to do, and the scramble for final customers would ultimately be left to one or two tradesmen who got few others. A little boldness and generosity on the part of our chief firms, without any questionable assistance from philanthropic members of Parliament, would, we are convinced, do more in one year towards bringing about general early closing than twenty years of almost fruitless endeavours to get the trade and the public all in one mind.

THE NEW BYE-LAWS.

IN the whole range of literature it would be difficult to find a subject more dry, wearisome, and repulsive than that of bye-laws. There are plenty of readers who can revel in the most abstruse investigations; numbers who are happy when immersed to the chin in equations and calculations; another class who can surrender themselves to the dreary inanities of our "comic" press; and occasional specimens of our race whose idiosyncrasy is to study parliamentary reports, blue-books, or Bradshaw; but there is, we believe, no case on record of any person, sane or otherwise, who deliberately devoted himself to bye-laws. What could be expected therefore, but empty benches, when a special meeting of the Pharmaceutical Society was called for the express purpose of considering certain modifications in their bye-laws? It was an ingenious idea on the part of the Council to fix the meeting immediately after the gay

and sparkling entertainment on "Woman," and by this means, aided by prompt action on the part of the chairman and secretary, a small proportion of the members was entrapped into forming the special meeting, and then and there, the new bye-laws were enacted. Business, pleasure, or hunger, had driven away the majority of those who had formed the annual meeting, but a select few still remained faithful to duty, and it is to their debate that we wish to direct attention.

Most of the modifications proposed to be made were merely formal regulations, with which we are not now concerned, but the most important were those which rearranged the Minor and Major Examinations, and fixed limits of age, and required a certain period of apprenticeship, or something similar, from every candidate for the former. With reference to the stiffening of the Minor Examination we have already had our say, and although it seems to have been finally decided upon, we have still confidence that it is a change neither called for nor desirable at the present moment. It is quite possible to over-urge the claims of academic training, and in the desire to "raise the standard," actually to weaken the position of pharmacy. This is not mere nonsense, nor written with the object of hindering educational efforts. We are as desirous as anybody to see the status of the trade elevated, but we get tired of the unending application of whip and spur to a willing horse. What is this continual foreing doing for the trade, as a trade? Do we not hear on every hand, especially from the provinces, how seriously the supply of assistants is diminishing? If anyone questions the accuracy of this complaint, let him refer to that part of our advertising columns, or those of the *Pharmaceutical Journal* where assistants' and employers' wants appear.

To take the readiest example which occurs, and a fuller examination would only prove the truth of the averred assistant famine more conclusively,—in our issue for May 1868 (just before the passing of the Pharmacy Act) we find the advertisements of twenty employers wanting assistants, and of thirty-four assistants wanting situations. In our last issue (May, 1873) there appear twenty-eight advertisements from employers, while the assistants issue only seventeen. We have means of knowing that this is by no means the case in other trades.

Good judges, men whom no one will accuse of being adverse, or even indifferent to pharmaceutical improvement, assert that this failure of the assistant crop arises from the fact that the examiners pitch their requirements higher than is necessary for the trade—higher than the trade can repay. We are not unaware of the reply to this argument, nor unmindful of its force. Of course the limitation of competition which must result will be ultimately good for those who remain, but the question is whether this choking system may not be, indeed, whether it is not being carried too far. If the idea is being worked out at the expense of vexing and annoying and hampering a large number of existing employers, it may be reasonable to ask the managers to hasten a little more leisurely. But this is not all. The "elevation of the status of the trade" is not by any means the invariable result of pharmaceutical high-pressure. Let somebody take the trouble to analyze the after history of those who most successfully pass through their student career, and tell us what proportion become retail chemists and druggists. How many of the Bell scholars are now in business? It is a notorious fact that the training incident to such a career is not conducive to a taste for the routine of a druggist's shop. An annual draft of the pick of our young men from the trade may be beneficial to the world at large, may be beneficial occasionally to the young men

themselves (but this is by no means invariably the case), but it is obvious that to describe the process as one "elevating the trade," is simply absurd. Let no one regard this as an attack on the Bell scholarships or on any educational systems. It is nothing of the sort. But surely it is well sometimes to take stock and see how and where we are drifting.

The truth is that no little knot of men, however earnest, at Bloomsbury-square or even at Whitehall, can perceptibly alter social conditions, or arrange them definitely to their own fancy model, any more than they can vary the climate. And in reference especially to pharmaceutical matters, we say emphatically that enthusiastic reformers have no right to use the Minor Examination as their instrument. They are entrusted with it in order that they may supply fit and proper men to the trade, and this they should carefully bear in mind.

The only bye-law, however, on which a discussion occurred at the meeting to which we refer, was a new one which provides (a) that candidates for the Minor shall be at least twenty-one years of age, and (b) shall have been engaged three years or more in the service of chemists and druggists, between their Preliminary and Minor. We confess that we rather like these regulations. With all respect for occasional precocious geniuses, it is not desirable that boys under twenty-one should be certified to be qualified chemists and druggists, and for many reasons it is very desirable that an apprenticeship of at least three years should form the avenue to the trade.

Mr. HAMPSON and Mr. URWICK opposed this bye-law however, first on the ground that it was *not* desirable to draw those hard and fast lines, and secondly, for the very sufficient reason that such a bye-law could not be legal. It was argued that the Pharmacy Act of 1868 required the Pharmaceutical Society to examine anyone who should present him or herself, regardless of age or previous occupation; and therefore that the Society had no legal right to make these limitations without the consent of Parliament. To make use of Mr. Giles' illustration, it may be quite true that wooden-legged assistants would be undesirable in a chemist's shop; but surely the Society would be overstepping its duties if, on the ground of this undesirability it should frame a bye-law requiring all candidates to have two flesh and blood legs. This seems forcible, and Mr. Hampson made his case unanswerable when he stated that the legal adviser of the Society was of opinion that such a bye-law would not be valid. One can scarcely conceive the Council asking for confirmation of a new bye-law which their own solicitor had advised them was not legal. But neither the President nor any member of the Council nor the solicitor himself, contradicted Mr. Hampson's assertion, and only Mr. Carteighe assumed it to be incorrect. Mr. Giles seemed to think it was of no consequence, for said he, "we can do pretty much as we like till we are disturbed." This is the robber's simple plan, "That they may take who have the power, and they may keep who can." The Pharmaceutical Society of Great Britain challenging a druggists' assistant to bring a hancery action against them, is an edifying picture no doubt. But what can surpass the comedy of a formal special meeting going through the anomaly of confirming an illegal bye-law?

A MEDICAL student, named Bewley, aged 21, in a reckless state of mind took a drachm and a half of chloral hydrate, which he procured from Mr. Rushton, a chemist in the Mile-End-road. He was taken to a doctor's soon after, but died in a very little time. Mr. Rushton knew him to be a medical student, or he would not have supplied him.



PARLIAMENTARY NEWS.—The Juries' Bill passed its second reading on June 5th, and is now on its perilous voyage through Committee. There seems a fair prospect that some part of it, including the exemption of all registered chemists and druggists from jury service will get through this session. The Trade Marks Registration Bill was down for second reading on Monday last, but was elbowed out by the Judicature Bill. It was adjourned until Thursday, and again adjourned until Monday next. The second reading of the Shop Hours Regulation Bill is fixed for next Wednesday.

The statement of attendances of members of the Pharmaceutical Council was published immediately after our last number. Messrs. Betty, Hampson, Hills, Urwick and Williams each attended thirteen Council meetings; Messrs. Bottle, Haselden, and Schaecht, twelve each; Messrs. Greenish, Owen, Radley, and Sandford, eleven each; Messrs. Atherton, Stoddart, and Sutton, ten each; Messrs. Baynes and Frazer, eight each; Mr. Brown, seven, and Mr. Mackay, four. Mr. Betty was the most assiduous attendant at Committee meetings, Mr. Greenish taking second place. Of course the country members of council are not expected to compete with their metropolitan colleagues in this matter.

The June meeting of the Pharmaceutical Council was the first of the new year. Mr. Thomas Hyde Hills was unanimously elected President, Mr. Bottle, Vice-President, and Mr. Williams, Treasurer. Messrs. Haselden, Schweitzer, and Umney were elected to fill vacancies on the Board of Examiners. Two resignations were announced last month. The third, that of Mr. George Edwards, is occasioned by the regulation fixing sixty-five as the limit of age for this office. Some discussion in reference to the Shop Hours Regulation Bill took place, the feeling against it being almost unanimous. Another short discussion terminated in the following very important resolution:—"That the question of the illegal sale of poisons and dispensing prescriptions by so-called associations be referred to the Parliamentary Committee for full consideration, and that the Committee be authorized to take legal advice to any extent required." A letter signed by Professors Redwood and Bentley was read recommending an advance of the fees in, and a re-arrangement of the sessional fees. The letter was referred to a Committee, and after some considerable criticism of the educational arrangements of the Society from Mr. Schaecht, Mr. Sandford, Mr. Baynes, Mr. Greenish, and others, it was agreed that the Committee should also go into the whole question if thought desirable. Dr. Attfield reported that Mr. Shinsone would resign the Assistant-Demonstratorship in the Laboratory at the end of the session.

It was unanimously resolved to invite Mr. R. Reynolds, of Leeds, to deliver the annual sessional address in October next.

Mr. C. H. Wood, F.C.S., has been appointed Government Quinologist at Sirala, and has consequently sent in his resignation (after September next) of the editorship of the "Year Book of Pharmacy." That position is therefore vacant, and the Executive Committee advertises for applications.

An inquest was held at Darlaston, on the body of a surgeon named Charles Fred. Empson, on the 26th ult. Deceased had been engaged to manage a practice for Mr. W. H. Wells, and for two months had been drinking freely, and occasionally obtained sleep from inhaling chloroform.

A child, named John Tremaine, 18 months old, whose parents lived in the West Derby-road, Liverpool, died from the effects of a teaspoonful of paregoric administered by the mother in mistake for ipecacuanha wine. At an inquest on June 5th, a verdict in accordance with the facts was returned.

A woman, named Begley, 53 years of age, living in School-lane, Liverpool, who was addicted to drinking, killed herself on the 5th inst. by swallowing some rat poison containing strychnine, which she had purchased from the shop of Mr. Richards, Paradise-street.

A statue is to be erected at Munich in honour of Baron Liebig. Dr. Hugo Miller of 110, Bunhill-row, acts as secretary for the English committee.

The principal chemists of Hull, have agreed to close their establishments at 7 p.m. (Saturdays excepted) since June 2nd, 1873.

The Alexandra Palace has run through its one fortnight of life and gaiety since our last. Its opening day was signalized by one of the most beautiful flower shows ever got together. The directors gave away some £1,200 in prizes, and this handsome sum brought into the field nearly all the chief horticulturists of the London district. The display of azaleas and calceolarias was as fine as it could possibly be. We deeply regret the disaster which seems to have crowned the misfortunes of a speculation whose short career was so promising.

OBITUARY.

On May 8th, Mr. David Edwards, pharmaceutical chemist, Glanmyddyfi, near Llandilo, South Wales. Mr. Edwards was in Paris during the siege and civil war, and it is said that he never quite recovered from the effects of the privations then endured.

On the 8th May, 1873, Mr. Edward Coward, chemist and druggist, of Western Hill, Durham.

On the 10th May, 1873, Mr. John Hudson Lewis, chemist and druggist, of South-street, Cockermouth.

On the 15th May, 1873, Mr. Robert Forster, pharmaceutical chemist, of Dover, aged 64. Mr. Forster had been a member of the Pharmaceutical Society since 1845.

BRITISH PHARMACEUTICAL CONFERENCE.

THE Executive Committee met at 17, Bloomsbury-square, London, on Wednesday, May 21st, 1873.

Present—Messrs. Schaecht (in the chair), Carteighe, Clayton, Greenish, Rimmington, Savage, Attfield, and Moss.

The following business was transacted:—

Bell and Hills Fund.—Professor Attfield reported that, in accordance with a resolution passed at the last meeting of Committee, he had caused to be printed a circular setting forth the origin of the fund, the action taken at the last annual meeting respecting Mr. Hill's gift of £200 for the encouragement of pharmaceutical research, and the proposal of the Committee to appropriate this sum by a method similar to that adopted under like circumstances by the British Association, including a set of rules for guidance in making grants. A copy of the circular had been sent to the respective editors of the CHEMIST AND DRUGGIST and the *Pharmaceutical Journal*, who had kindly given considerable prominence to the matter. A copy, together with a private letter on the subject, had also been sent to each member of the Executive Committee and to every member who had contributed an original paper to the Conference. In all, about seventy copies had been distributed. In answer, no actual applications for grants had been made, but several suggestions of subjects for investigation had been offered. Mr. Martindale suggested a thorough investigation of the plasters of the Pharmacopœia. Dr. Wright suggested that sums might be offered to members who would aid in clearing up questions about doubtful alkaloids. Mr. A. H. Allen would give a grant to any member who would further work at methods for detecting adulterations or admixtures of fixed oils; and there were the suggestions by Mr. Tielborne respecting researches having for their object the improvement of many of the official formulæ and the exclusion of others, contributions to the natural history of drugs, modes of economizing alcohol in making spirituous preparations, investigations on disinfectants, and papers on the application of physical instruments in pharmacy. Mr. Savage would encourage gentlemen having mechanical skill to produce an improved pill-machine for dispensing purposes, and machines for rapidly and perfectly commingling ingredients for large and small pill-masses. Mr. Greenish would urge the production of a model compact pharmaceutical laboratory. Professor Attfield said he had also received letters respecting

the circular from Messrs. Proctor, Rogerson, Keyworth, D. B. Sharpo, Braithwaite, R. H. Davies, S. R. Atkins, and E. C. C. Stanford, and reminded members that some two hundred subjects for research were given in the "blue" list, a copy of which had recently been sent to every member of the Conference. If the cost of working out any of these subjects deterred members from accepting them, such members should at once apply to the Committee for grants.

The CHAIRMAN said the issue of the Bell and Hills Fund circular had produced some valuable suggestions, which would probably be further entertained by members when the minutes of the Committee came to be published.

Increase in the Annual Subscription to the Conference.—A short discussion then followed on raising the subscription of membership to the Conference. The present income of the Society, it was stated, would not bear the cost of the Year-Book, and it was ultimately resolved unanimously, "That the annual subscription to the Conference be in future 7s. 6d. per annum."

Place of Meeting for 1874.—Professor Attfield said that on the 7th of December last he had ventured to ask two prominent members of the Conference resident in Ireland, for some general information respecting pharmacy in Ireland, where the Conference might possibly meet (in Belfast) in the autumn of 1874, in accordance with the custom hitherto obtaining of assembling at the time and place of meeting of the "British Association for the Advancement of Science." One of these gentlemen wrote:—"After careful consideration I cannot advise that the Conference should meet in Belfast. I fear that scientific pharmacy is not very well represented here in Ireland. Moreover, Belfast is a long way from London, and unless the collateral attractions of the 'Giant's Causeway' might be an incentive, the local inducements are but small." The other gentleman wrote:—"After viewing the matter in every light, I cannot recommend the Conference to go to Belfast. You would get very few Irish papers at the meeting." In April also Professor Attfield, as secretary, had at the suggestion of Mr. Schacht, written to Mr. Pring (Messrs. Grattan and Co.), Belfast, explaining the objects of the Conference, and its custom respecting the place of meeting, and had forwarded to him a 'Year-Book' and various papers relating to the Conference. Mr. Pring said in answer that he feared a sufficient number of members to make the meeting a success would not attend. In answer to a fuller and more explanatory letter which the Secretary read to the Committee, Mr. Pring gave reasons (which he afterwards personally repeated to the Committee at greater length) why it would be inexpedient in his opinion for the Conference to meet at Belfast.

Mr. GREENISH said that notwithstanding the opinions of Mr. Pring, and those whom Mr. Pring represented, he hoped the Conference would keep up the practice of meeting in the town in which the British Association assembled.

Mr. CARTEIGHE would like to hear more about Belfast and the pharmacists there, before finally deciding the question under consideration.

Mr. CLAYTON, who had just visited Belfast, gave valuable information regarding the relative positions there of the dispensing apothecaries and the so-called druggists.

Mr. Schacht thought that the further consideration of the subject had better be adjourned. The Committee consequently postponed the discussion.

Editorship of Year-book.—The Secretary reported that Mr. C. H. Wood had intimated that in consequence of his appointment as Quinologist to the Government in India, he would have to leave England about next October. But this would not prevent him from editing the next issue of the "Year-Book," and he proposed, therefore, to hold his present office of editor until September next, when he would place his resignation in the hands of the Committee.

The Secretary was instructed to issue an advertisement announcing that the editorship of the "Year-Book for 1874" would be vacant, and inviting applications from candidates for the appointment.

A number of gentlemen were elected members of the Conference.

Another meeting of the Executive Committee was held at 17, Bloomsbury-square, London, on the 29th May, 1873. Present—Messrs. Deane (in the chair), Hanbury, Greenish, Carteighe, Hills, Williams, Umney, Attfield, and Moss.

The minutes of the previous meeting were read and confirmed.

Place of Meeting for 1874.—Professor Attfield reported that on the day after the last meeting of the Committee he received a letter from Mr. Reuben Bolton, L.A.H., of Belfast, who wrote as Secretary of the Protective Association of Licentiate Apothecaries, and stated that the unanimous opinion of the members was that it would give them very great pleasure to welcome the Pharmaceutical Conference, and to co-operate in furthering its objects, if the present movement of druggists in Ireland against the interests of the apothecaries did not present an obstacle. To fully explain the matter and the difficulties of the situation, it was agreed that a deputation of two or more of the members should proceed to London some time next week to meet the Committee of the Conference, if the Committee was willing to receive them.

Professor ATTFIELD said that he at once acknowledged Dr. Bolton's letter, assuring him that the executive of the Conference would gladly hold a special meeting on any day that would best suit the deputation, explaining also that the Conference was a non-political body, that membership of it conferred no guarantee whatever of professional competency, and giving other information respecting the Conference. In answer, Dr. Bolton fixed Thursday, May 29th, as the day of meeting, and stated that the deputation would consist of Dr. Whitaker, Mr. Pring, and Dr. Cantrell. Professor Attfield at once telegraphed to Dr. Bolton that the executive would meet the deputation at 17, Bloomsbury-square, on the day mentioned, at eleven o'clock in the forenoon, and two of the three gentlemen were now waiting to meet the Committee.

Dr. Whitaker and Mr. Pring were then introduced to the Chairman and other members of the Committee. Dr. Cantrell was unable to be present.

Mr. PRING, after making some remarks complimentary to the Conference, and acknowledging the welcome given to the deputation by the Chairman, went on to say that the compounders of medicine in Belfast, who, before they could legally dispense prescriptions had been obliged to pass a classical examination, to serve a long apprenticeship to pharmacy, and to face the ordeal of examination in chemistry, botany, and materia medica, were disinclined, in the interests of pharmacy as well as in self-interest, to recognise on any such common footing as that afforded by the Conference the so-called druggists of Ireland, men who might be of good social position, and who often traded largely in other articles, but who had given no guarantees of educated fitness for pharmacy such as those just mentioned. They had never dispensed prescriptions, and had been prevented from so doing for the last hundred years.

Dr. WHITAKER adverted to the honour conferred on him by his appointment as a representative of Irish compounders of medicine to a body like the British Pharmaceutical Conference, which had such excellent aims as encouragement of research, and the promotion by non-political means of friendly feelings amongst pharmacists. He was glad, too, because the occasion gave him an opportunity of explaining that, although he and Mr. Pring and those whom they represented were termed apothecaries, they were not apothecaries in the English meaning of the word, and still more their position was identical with that of English pharmacists, who merely sold poisons and dispensed prescriptions. It was true that the state of the law was such that they—the apothecaries of Ireland—were legally recognised medical practitioners, and had had to pass a medical as well as a pharmaceutical examination, but this accomplished, many of them who obtained the qualification merely for the purpose of keeping shop and dispensing medicines, ceased to make use of their medical knowledge, and practised pharmacy only. Pharmacy in many respects was more advanced in Ireland than in England, for only those could legally practise it, who had spent a certain number of years in preparing medicines, then in attending the classes of the Professors, and lastly, in passing a much more severe examination than the English "Minor," and he thought pharmacy would be degraded instead of elevated if an Act came into force admitting into the ranks of Irish pharmacists the grocers and sundriesmen, who, as a rule, knew nothing of pharmacy beyond the art of buying and selling, among other things, drugs; and who on the strength thereof called themselves "Druggists," latterly adding thereto the name of "Chemist." Such men would no

doubt gladly fill the meeting-room of the Conference, but the apothecaries, who were the real pharmacists, the sole dispensers of prescriptions, would rather not meet gentlemen who would know little or nothing of the subjects likely to be considered there. Doubtless the so-called druggists might even now become members, without waiting for a visit from the Conference, but that was a very different thing from the Conference being brought to their doors, thereby giving them a certain kind and amount of status to which they were not fairly entitled.

Some conversation then ensued on the general position of parties in Irish pharmacy. Nearly all present took part in the discussion, the object of which was to enable the Committee to come to a satisfactory decision respecting the question of holding a meeting in Belfast in 1874. In the end it appeared that in Ireland there were apothecaries practising medicine and pharmacy, apothecaries practising pharmacy but not medicine, and druggists practising neither medicine nor pharmacy. The second of these three classes was the most numerous of the avowed dispensers of medicine, and provided anatomy and physiology could be removed from their examinations would be content to let matters remain as at present; they would, however, gladly aid in establishing a new society like the Pharmaceutical Society of Great Britain, or perhaps better, in founding an Irish branch of the latter society. They would not, however, admit any qualification for dispensing inferior to the English Major Examination.

The deputation then retired. The following resolution was proposed with the view of deciding the question as to whether or not it would be desirable, in 1874, to continue the custom of the Conference assembling in the town and just before the time of the meeting of the British Association.

Moved by Mr. Daniel Hanbury,—

Seconded by Mr. Thomas Hyde Hills,—

"That the Committee, having heard the statements of Dr. Whitaker and Mr. Pring, apothecaries of Belfast, regarding the present unsettled condition of pharmacy in Ireland, are of opinion that it would not be expedient for the Conference to meet in Belfast in 1874."

Carried unanimously.

Some discussion ensued respecting the class of town at which to meet in 1874, and a very general opinion was expressed in favour of London. A letter from the President was read, in which, while agreeing to London, Mr. Brady questioned whether or not some attractive watering-place, not likely to be visited by the British Association, and where high-class pharmacy was in the ascendant, might be chosen for the gathering in 1874. No decision followed, but it was remarked that if London were selected, the time of meeting should be quite early in August or even during the last week in July.

Pharmacy.

CINCHONA CULTIVATION IN ST. HELENA.

MR. OSWALD A. READE (*Pharmaceutical Journal*) has recently visited the island of St. Helena, and describes the condition of the cinchonas planted some four years since on Diana's Peak, the loftest point of the island. Out of more than a thousand at first planted, less than three hundred now remain. The majority have seemed to succeed until their roots have found their way into the heavy red clay which forms the under-soil, and then they sicken and die. According to Mr. Reade's judgment, of the trees remaining *C. succirubea* are the most promising and *C. calisaya* the least so. Contrary to general opinion, and to the apparent result of his own observations, Mr. Reade thinks the cultivation of red cinchona in St. Helena would be a success if well looked after.

ON DISTINGUISHING CREASOTE FROM CARBOLIC ACID.

Mr. John A. Clark, of Guelph, Ontario, writing in the *Canadian Pharmaceutical Journal*, refers to Mr. Morson's test, which is that while carbohc acid is soluble creasote is insoluble in glycerine. The writer considers that a more certain test is the alcoholic solution of perchloride iron (or

Tr. Ferri Perchlor B.P.), which, when added to an alcoholic solution of creasote, produces a "dark greenish-blue" color, but with an alcoholic solution of carbohc acid only a "light brown" coloration. By this test one part of creasote in 500 parts carbohc acid can be easily detected. But the adulteration of creasote by carbohc acid is more difficult to detect, but can be ascertained in the following way: Boil a few drops of creasote with nitric acid (about two drams) until red fumes are no longer evolved; this yields a solution, which, when neutralized with solution of caustic potash, gives no precipitate, the creasote forming oxalic acid. Carbohc acid when treated in the same manner is very violently acted on by nitric acid, and forms picric acid (trinitro-phenylic acid), which, when neutralized with solution of potassa, gives a "yellow crystalline" precipitate. One part of carbohc acid in fifty parts creasote can be readily detected in this way.

COD-LIVER OIL AND LACTO-PHOSPHATE OF LIME.

Mr. Edward Chiles has published in the *American Journal of Pharmacy* a formula for this preparation, which up to the present time he has found to give most satisfactory results. To ensure the employment of a perfectly sweet article he recommends that it should be prepared extemporaneously, and not kept in stock. The following is the formula:—

"Take of gum arabic, ʒij.; water, ʒij.; Syr. lacto-phosphate of lime, ʒvj.; cod-liver oil, ʒviij.; essential oil of bitter almonds, six drops; rub the gum, water, and syrup together, until a smooth mucilage is made, then add the oil gradually with constant stirring, and lastly the oil of bitter almonds.

"Thus made, each tablespoonful of cod-liver oil and lacto-phosphate of lime contains four grains lacto-phosphate of lime and fifty per cent. of cod-liver oil. The gum in the above should be selected, ground, and passed through a sieve of sixty meshes to the inch. Cod-liver oil and lacto-phosphate of lime, prepared in this manner, forms a preparation free from unpleasant taste and odour, and enables the practitioner to administer these valuable remedies without repugnance on the part of the patient."

SYRUP LACTO-PHOSPHATE OF LIME.

Take of chloride of calcium, ʒj.; phosphate of soda, ʒiv.; concentrated lactic acid, ʒj.; dissolve the chloride of calcium and phosphate of soda separately, and mix the solutions; wash the precipitate and dissolve in the acid. Filter and mix with sufficient syrup to make two-and-a-half pints.

A NEW SUBSTITUTE FOR QUININE.

Among the specimens of drugs exhibited in the International Exhibition in Vienna is the *Echisera scholaris*, a plant of the natural order *Apocynæ*. It is especially abundant at Luzon, in the province of Batanga, in the Philippine Islands, and its bark has long been used by the natives, under the name of dita, as a remedy in all kinds of fever. Herr Gruppe, an apothecary in Manilla, has found in it an uncrystallizable very hygroscopic bitter substance, to which he has given the name of ditaïn. The principal Spanish physician in Manilla, Dr. Miguel Zina, has given it to numerous hospital patients under his care, and has found that ditaïn is not only a perfect substitute for quinine, but that its use is not followed by the disagreeable results which often attend the use of quinine. It is given in the same doses and in the same way as quinine. In many cases, also, its activity as a tonic was well marked. The ditaïn is prepared from the bark in the same way as quinine from cinchona: 100 grammes of bark give 2 grammes of ditaïn, 0.85 gramme of sulphate of lime, and 10 grammes of a perfectly inactive extractive matter. A single tree yields a large quantity of bark without injuring its growth. It is calculated that the price of ditaïn in Europe would be about 160 francs per kilogramme (3s. 6d. to 4s. per ounce).—*British Medical Journal*.

OPIUM IN COMMERCIAL MEDICINES.

Mr. S. D. Hayes, in the *American Chemist*, calls the attention of public health officers to the increasing consumption of opium and morphia in the cough mixtures, tooth washes, lotions, liniments, and other preparations now so freely offered for sale by patent medicine vendors.

"Some analyses," he writes, "recently made here of medicines intended for internal use, have shown the quantity of morphia present in several of them to vary from one-quarter of a grain to one and a-half grains in the dose recommended by the printed directions accompanying the medicines. One nostrum, a sure 'Cure for the Opium Habit,' was found to be a clear solution of sulphate of morphia, coloured pink by aniline red and sweetened with sugar; and a dose, containing very nearly two grains of sulphate of morphia, was to be taken three times a day by the patient when suffering severely from depression and other symptoms. The 'brandy,' sold by a dealer in medicines in the country, was found to have been mixed with laudanum and extended with water in such proportion as to insure large profits, but it contained morphia equal to two and a-half grains of opium in four fluid ounces of the 'brandy.' A tooth wash contained nearly four-tenths of a grain of morphia in each fluid ounce; and a cough mixture, more than three-tenths of a grain in the dose directed for a child."

MECONATE OF QUININE.

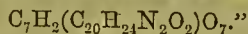
In the same journal Mr. P. T. Austin, Ph.B., describes some experiments upon a new salt of quinine, a combination of quinia with meconic acid:—

"If an alcoholic solution of meconic acid be added to an alcoholic solution of quinine a white, curdy precipitate is formed. The precipitate is soluble in hot water, being deposited on cooling in beautiful crystals. The water solution gives reactions for both quinine and meconic acid. The first curdy precipitate on drying forms a mass resembling dried glue, the next precipitate forms minute scales of a silken lustre. Finally, small crystals are obtained. When filtered and dried on bibulous paper the salt has a peculiar sheen, resembling minute fish scales.

"A direct estimation of quinine was made as follows:—A weighed portion of the dried salt was dissolved in water by the aid of heat, the quinine was precipitated by ammonia, and dissolved in ether. The ethereal solution was separated from the ammoniacal liquid, and washed with water, by means of a stopcock funnel, after which it was evaporated and weighed. Though the greatest care was observed in the washing, a loss of quinine occurred.

Salt.	Quinine.	Found.	Calculated.
·25 grm.	·137 grm.	54·8 per cent.	56·66 per cent.

"The composition of the salt is then most probably



GUARANA POWDER IN SICK HEADACHE.

We have several times referred to the favourable impression which Guarana has already created in medical circles, and we are pleased to find testimony to its efficacy, in a letter to the *Medical Times and Gazette*, from Mr. F. Irving de Lisle. "My experience," says the writer "tends to show that for headaches, arising from nervous exhaustion or from a depressed state of the system, its administration is attended with the best results, in fact it is quite a specific. The beneficial effect usually commences to manifest itself in from ten minutes to a quarter of an hour, and in less than an hour the headache generally disappears. When headache arises from neuralgia or rheumatic causes or from a disordered state of the stomach and bowels, the administration of the powder is useless. The dose in which I usually give it is ten grains, but in two cases I have had to increase the dose to twelve and fifteen grains, as after taking the powder several times a sort of toleration of it was acquired, and ten grains, the quantity first administered, became insufficient. The effect of a large quantity—as a drachm which I took some time back—was to cause an uneasy sort of wakefulness difficult to describe, with slight noises in the head followed by dyspepsia. The taste of the powder is not objectionable."

An advertisement in another part of this journal invites chemists and druggists to become agents for the wines bottled by Messrs. Spiers and Pond. The reputation which this firm has attained by enterprise and excellent management is likely to make their agencies advantageous.

Literary Notes.

THE second edition of a neat little work "The Civil Service Guide," by Mr. R. Johnston, has just been published by Messrs. Longmans and Co. The author gives a information requisite for candidates for Government office and also (which is a valuable compilation) a tabular statement of the emoluments and rates of advance of a situations in the Civil Service open to competition. The best authorities have testified to the general accuracy this feature of the volume. After this follow specimens the questions actually set to candidates in all the branches of the examination. At the end of the book is a lithographed letter which is execrably written, and which candidates have been required to decipher and copy out half an hour. Also lithographs of such styles of calligraphy as have gained high places in the competition.

Situations in most Government offices are now given in open competition. For a few of the most important offices a special scheme of examination, the first-class, is held. But vacancies occur very seldom, and salaries are not much better than in the other departments. The second class examination is that usually held, and for this candidates must be between sixteen and twenty years of age. The competition is very severe, and only a thorough sound education, or a severe cramming, will give a competitor a chance of placing his name high enough on the pass list to secure a situation. Salaries commence at from £90 to £100 a year.

DR. LETHEBY ON FOOD IN AMERICA.—The *Boston Journal of Chemistry* has "spotted" some curious statements in Dr. Letheby's work on food, in relation to American diet. Our contemporary writes:—"One of the most comical blunders of the worthy doctor is his taking it for granted that because at our hotels breakfast is served from eight to eleven, luncheon from one to three, dinner from six to eight, etc., we spend some *ten hours a day* at table disposing of these most elaborate meals! He also states that the flesh of pheasants in Pennsylvania and Philadelphia is unwholesome because they feed on the buds of the laurel and that on the Alleghany Mountains, the flesh of all the cattle is poisonous, and so also is the milk they yield, and the cheese which is made from it. He appears not to have heard that in the semi-tropical regions of Maine and Bangor the remarkable prevalence of trichiniasis in the spring of the year is ascribed to the local practice of letting the hogs feed on the prunings of the orange-trees; and he does not refer to the fatal epidemic which almost exterminated one of the Indian tribes of Connecticut a year or two ago, and which was pretty clearly proved to have been due to eating the flesh of the alligator after that animal had been feeding upon an unwholesome species of soft-shelled crab found in the Missouri River." The editor of the *Danbury News* writes the following serio-comic note on the affair:—"The *Boston Journal of Chemistry* will please accept the thanks of this paper for calling the attention of its scientific editor to the late valuable treatise brought out by Dr. Letheby. The doctor and ourselves are personal friends, and have together delved in the mysteries of science. The doctor's theory that corn-meal is debilitating is no new thing to us. We were with him when he made the discovery. We were standing in front of a grist-mill at the time. It was a glorious spring day. The doctor was demonstrating in his usual clear and captivating manner how impossible it was to bed oysters in the Mexican Gulf, because of the danger they would constantly be in from being kicked to death by Rocky Mountain goats, when a fifty-pound bag of corn-meal descended from the third story of the mill, and broke its back on the head of the man of science. It was thus the doctor received those startling views of corn-meal which have since awakened the world. We never could quite agree with the doctor on his position in regard to the molecular transformation in Wisconsin parsnips, which he so enthusiastically took and held, in his address to the Newsboys' Union, in Philadelphia; but, as he has already stated in his later works that "it is a cursed poor rule that won't work both ways," we have concluded to withdraw from our position."—*Danbury News*.

Trade Memoranda.

Messrs. Henry Allnutt and Co. will in future carry on the business until now known under the title of the Concentrated Pure Malt Vinegar Company. They will discontinue their offices in Cannon-street, and confine their business to 148, Bermondsey-street.

Mr. Hill, of London, has succeeded to the business lately carried on by Mr. Crick, at Ipswich.

Mr. Durham, chemist and dentist, late of Norbiton, and formerly of Brighton, is about to commence business at Lowestoft.

Mr. Beu Edmonds, of Lowestoft, is about to retire from business. He has been nearly half a century in business in that town.

Mr. Patman has succeeded to the business lately carried on by Mr. Searby, of Norwich. Mr. Searby has retired from the drug trade, and is about to go into the soda-water trade in the north of England.

Messrs. Dows Clark and Co. have fixed at Mr. Watson's establishment, 47, Old Broad-street, a very imposing ice-cream soda-water apparatus, exactly similar to those they have placed in the Vienna Exhibition, where they are much esteemed.

Penny bottles of a good cement, well-named "Tenacitine," are put up by Mr. E. J. Toye, of Bow-road, and offered to the trade through our columns. We can only remark that such a marvel of cheapness is a delightful oasis in our present desert of high prices.



THE Liverpool case of Kelly's Butter came before the Court of Queen's Bench on June 4. After long arguments, Mr. Justice Blackburn said the magistrate was wrong in his law, and the case must go back to be reheard. The men who sold butter must not sell an adulterated article. As to the hardship on the retailer, he had nothing to do but get a sample analysed; and it was no answer here to say that it was not done with the intention to increase its weight or bulk. The other judges concurred, and the case will therefore be remitted to the magistrates.

Frederick Tucker, who had been in the employ of Messrs. Terring and Co., manufacturing druggists, Aldersgate-street, for over twenty years, and now held the position of manager of the tincture department, and John Holland, a general dealer, living in Spitalfields Market, were charged with stealing half a pint of essence of ginger, belonging to the prosecutors. The prisoners, by the advice of their solicitor, pleaded guilty, and were sentenced to four months' imprisonment with hard labour.

William Walter Hastings, of 5, Gaisford-street, Kentish Town, a young man who, it was stated, was engaged in commercial pursuits in the City, was summoned at the Clerkenwell police-court for assaulting and beating Mr. J. Knowles, chemist and druggist, of 33, Seymour-street,uston-square. The defendant went with the complainant's on-in-law, a Mr. Fauvet, for the purpose of seeing the latter's child, which the complainant is keeping, because, as he stated, Fauvet would do nothing for his wife and children. Words ensued between all the parties, and in the result the defendant took hold of the complainant, called him a blackguard, and struck him. The defence was a total denial of the charge. The magistrate ordered the defendant to pay a fine of 5s. and the costs, which he at once complied with.

At Westminster, George Barton Hall, middle-aged, was

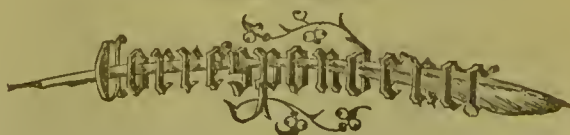
finally examined, charged with obtaining money by false pretences. Mr. George Lewis prosecuted. The prisoner was traveller to Mr. Cox, of Brighton, "coated pill" manufacturer. He was allowed 20 per cent. on all sales, with a stipulation that he was not to receive any money on account of the firm. He obtained, however, £2 14s. 9d. from Mr. Durdan, a chemist, of the Fulham-road; £2 11s. 4d. from Mr. Kinsey, of Hugh-street, Pimlico; and £2 5s. 6d. from Mr. Caverley, of Fair-street, Marylebone, and never accounted for the money. The defalcations altogether amounted to £50. When apprehended by Sergeant White he said he had done it through drink. The prisoner, who wished the matter settled there, said he had written to Mr. Cox from the House of Detention, and that gentleman had promised to send him out of the country when his imprisonment had expired. Mr. Arnold said he must commit the prisoner for trial. It was a curious anomaly of the law that the prisoner could not be dealt with on this charge. Had he been a servant he could have been dealt with for an embezzlement, and a great deal of trouble and expense avoided.

A painter and his wife, Frederick Ford and Mary Ann Ford, were charged at the Guildhall with stealing a large quantity of scent-bottles, cut-glass toilet-bottles, &c., belonging to Messrs. Maw and Co., druggists' sundrymen, of Nos. 11 and 12, Aldersgate-street. The male prisoner was a painter employed by the contractor who was repairing the premises. Mary Ann Ford was discharged, and Frederick Ford committed for trial.

A young man, named Frederick Burley, son of Mr. Burley, chemist, of Fakenham, Norfolk, was charged at Nottingham with having attempted to commit suicide. The prisoner, while fishing in the Trent, suddenly threw away his rod, and jumped into the water. He was with difficulty rescued. He gave as his reason for doing so the fact that his mind had become unhinged by reading sensational novels, and that at the moment he was in a sort of dream. He was remanded.

FRY'S SOLUBLE COCOA.

An important case under the Adulteration Act was heard before the Richmond (Surrey) magistrates on May 14. Mr. F. Cave, grocer, Richmond, was summoned by Mr. W. Cook, inspector of weights and measures, for selling him a packet of adulterated cocoa as an unadulterated substance. The cocoa was sent to Dr. Stevenson, the county analyst, whose certificate stated that the cocoa was adulterated, inasmuch as it contained an admixture of sago and sugar, but nothing injurious to health. The packet was labelled "Fry's Soluble Cocoa, manufactured by J. S. Fry and Sons from cocoa, combined with other perfectly pure and wholesome ingredients, according to Act of Parliament." The packet was wrapped in a trade cover of Mr. Cave, on which was also printed, "This is an admixture in which no injurious ingredient has been used. Vic. 35 and 36, c. 7."—After the magistrates had consulted a few minutes, the Chairman said it was not their opinion that a conviction could follow in this case. In the face of the notices upon the cocoa, it was doubtless the presumption in Mr. Cave's mind that his customers knew what they were buying. But it should be borne in mind that in the case of those who could not read the attention of purchasers should be called to any manufactured article, even if it should be all the better for the admixture. This requirement of the Act was imperative, and if not carried out by Mr. Cave in a similar case a conviction must follow.



SURGICAL INSTRUMENTS AT THE EXHIBITION.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—I have read your remarks on the Surgical Instruments at the Exhibition, and although I agree in the main with them, and quite believe that Farmer Brown and his family will neither be morally nor mentally benefited by a careful investigation of surgeons' instruments, you will, I think, allow that at times it is even useful to a surgeon to see what manufacturers generally can produce—and he may take the opportunity to compare the make of his own special

set of instruments with those of others—and it is, I take it, more for those particularly interested in these matters than for the general public the Exhibition was intended, and expected to be useful and worth consulting.

You will also remember that surgical instruments are really a part of the class—steel and cutlery—and I have a notion that it was thought this department would not be considered complete without the addition of some of the most exquisite pieces of workmanship in steel manufacture.

Be that as it may, the few instruments contributed by myself must rather be regarded as a curiosity than in any other light. I have placed them there for the purpose of showing what excessively rude instruments are still employed by the native doctors of India.

The eye instruments, which you do not notice, are among the most curious, and one can only wonder more eyes are not lost in operating with them than I find to be the case.

I remain, Sir,

Yours very truly,

JABEZ HOGG.

The following description of the instruments shown by Mr. Jabez Hogg will give some idea of the horrors of an ophthalmic operation in India:—

The instruments were the property of a native surgeon of the north-west provinces of Bengal, who enjoyed a reputation as a skilled eye-doctor. They were sent to Mr. Jabez Hogg by Dr. Calthrop of H.M. Indian Army, who saw the native use them on several occasions.

The Indian operation for the removal of cataract is a very ancient one, and in England would be called a rude mode of depression, or displacement of the lens. The operator takes up his position behind the patient, and proceeds to hang on the *blunt copper hook* to the lower eye-lid, more for the purpose of accustoming the eye to the feel of an instrument than for depressing the lid. The upper lid is then raised with the fingers of the left hand, and with the *lancet bladed instrument* held perpendicularly between the fingers of the right, a bold thrust is made about an eighth of an inch from the junction of the cornea with the sclerotic, through the sclerotic coat. Immediately on the withdrawal of the lancet the large *triangular shaped copper probe* is pushed into the interior of the eye, and with a circular sweeping movement the lens is rapidly depressed. The sharp-pointed iron hook is only occasionally brought into requisition; this is more generally used to raise up a pterygium before it is snipped off with scissors or knife. The results of the operation are, as might be expected, very unsatisfactory; for in a large proportion of the patients eyes are lost by suppuration, and in a still larger number the lenses rise up again into the anterior chamber, and the sight is thus lost in the course of a few days or weeks.

The white circular buttons are much used by native doctors for the cure of all kinds of opacities of the cornea. The button is applied directly to the cornea, and kept in contact during short intervals daily, and it is said that large numbers of cures are effected by the remedy. The composition of the buttons is believed to be a secret, but they are certainly nothing more than fused and moulded pieces of nitrate of potash.

THE BETTS DEFENCE FUND.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—Some few months since I was waited upon by two gentlemen who represented themselves to be members of the Betts Defence Committee, who solicited a donation on behalf of the Defence Fund; I gave my mite, for which I was thanked, and the two gentlemen withdrew, leaving me under the impression that I should receive an official acknowledgment, but as none reached me I concluded that at the termination of the affair I should receive a proper balance sheet, showing my contribution amongst the rest, and how the money had been expended.

I have recently been informed that the committee has been dissolved, but I cannot conceive that any body of gentlemen administering a trust can so far forget themselves and the duty they owe to the donors as to close a matter

involving contributions which, if collected from all the gentlemen who promised to support the defence, and who signed a guarantee at the first meeting, must amount to something over a thousand pounds, without rendering an account of their trusteeship, and thereby place on record the names of those who sympathized with them and contributed their donations towards the heavy costs the defendants must have been subjected to.

Perhaps the publication of this letter may awaken the committee to a sense of their duty.

I remain, Sir, yours truly,

A CONTRIBUTOR.

May 27th, 1873.

[We shall willingly give space in our pages for the publication of an explanation of this apparent irregularity from any member of the committee.—Ed. C. & D.]

UNTRUSTWORTHY CUSTOMERS.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—A lady brought the following prescription to be prepared, and told me she paid 1s. 6d. for four times the quantity. As it bore the impress stamps of some other chemists I wrote to them all, five in number, with the following results:—

Reply No. 1.—Charged for a single quantity, 1s. 6d.; for four quantities, 3s.

Reply No. 2.—Charged for a single quantity, 1s. 6d.; for double, 2s. 6d.

Reply No. 3.—Charged for a single quantity, 1s. 2d.; for four quantities, 3s. 6d.

Reply No. 4.—Gave no price, but simply a point blank denial of the assertion that 1s. 6d. had been paid for four quantities.

Reply No. 5.—For three quantities, 2s. 6d. I think such barefaced attempts should be exposed, and therefore I ask you to be kind enough to insert this and the prescription, in order to put any of the trade on their guard.

I remain, Sir, yours truly,

W. SANDALL.

Northampton, May 28th, 1873.

THE PRESCRIPTION.

Rx. Potass. iodidi, gr. xij.
Tinct. nucis vomicae, ʒij.
" aurantii, ʒvj.
Aqua, ad ʒiiss.

A teaspoonful to be taken in half a wineglassful of water three times a day after meals.

Miss B—

HOPES DEFERRED.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—I quite agree with the remarks of a Registered Chemist of Leeds. It is high time something were done in the interests of chemists. It is of little use to spend the money and time necessary to qualify to pass an examination if the sole benefit be the putting up of the words pharmaceutical chemist over the door. The public require of us that we should have the education of gentlemen, and it is enforced by law, but I do not see that the privileges which are extended to other professions, where the qualifications are marked out by law, are afforded to chemists. The existence of such associations as that at 357, Oxford-street, ought to be impossible and would be so if our Pharmaceutical Council occupied themselves in something more than scientific discussions and the interminable rights of women. If the gentlemen who compose that ornamental body would but condescend to men of low estate and become practical, every grocer would cease to be a druggist in disguise, and we should not much longer see pharmaceutical preparations side by side with bacon, cheese, and American lard.

Were the same restrictions enforced upon the sale of drugs that exist on the Continent, we should soon rise to a respectable position, and not be forced by the sheer neces-

sity of our circumstances to deal in numerous commodities foreign to the business of a chemist.

There is a growing cry through the length and breadth of the land for diminished hours of labour, and for the teeming millions to have some little of the *otium* enjoyed by the upper ten. The druggist only continues to emulate the publican in the lateness of his hours. The reason is not far to find. The majority of chemists drag on their thirteenth hours daily toil to exist. The returns of businesses for disposal prove that fact. But until we move all together in the matter, useful legislation will not be attempted. The pressure of opinion must make itself felt before we can hope that our governing body will in earnest satisfy the reasonable requirements of chemists.

Yours truly, CHELTENHAM.

EARLY CLOSING.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—A great deal has been written in your Journal on early closing, and I believe a bill is even now before Parliament for curtailing the hours of labour. May I crave a small space for what, after much thought and experience, I consider a fair view of the subject? I will take, as an instance, the hours of an establishment in the west-end of London. The assistants commence their duties at 8.30 a.m., and continue with little or no cessation till 9.30 p.m., with the exception of one evening a week each, when they leave at 5.30. Every third Sunday one is "on guard" all day. I have said nothing of meal-times, but, on the other hand, I have not mentioned the two evenings a week when the one "on guard" does not go out at all. With regard to the former, the exigences of the business frequently require so much jumping up to attend to the shop, that it is almost more tiring than continuing at work. If we examine the above, and divide the "guard" Sundays between the three weeks, we find that it averages seventy-nine hours confinement in the shop weekly, and that in a business, which being three-fourths dispensing, is of the most anxious and wearying description. I have every reason to believe the above is a most favourable example, and that where there is one better there are many far worse. Now, I would respectfully ask if such lengthy hours cannot be remedied in some degree? I am aware that many employers will perhaps say, "If the hours do not suit, the remedy is in your own hands; you can leave," and I have even heard it argued that those who most earnestly advocate short hours as assistants, keep far longer ones when they have shops of their own; but I contend that an assistant leaving a situation does not benefit in the slightest degree the thousands of his fellows who still suffer from long hours, and if a man individually chooses to work all night, nobody can prevent his doing so, but it is surely unjust to expect those in his employ to do the same. The remedy is simple, and is not so much a question of early closing as of liberality of employers, and if every tradesman employing one or more assistants, would once a fortnight grant each of them the remainders of the day from two o'clock, it would solve the difficulty, and I trust that such will soon be the case throughout the kingdom. It is said we are a nation of shopkeepers; if so, for the credit of the nation, don't let it be said we had to appeal to the Government to compel our employers to grant such a modest demand. Should you kindly insert this letter in your next impression, I intend forwarding a copy to the Early Closing Association, feeling confident that those gentlemen will help us, by every means in their power, and continue their noble efforts, which have done so much to shorten the hours of labour. I earnestly trust it may not be necessary to apply to Parliament, but if so, I would cheerfully subscribe £5 towards it, and if every tradesman's assistant in the land would subscribe but one penny, an ample fund would be provided, and the object, if obtained, would be a priceless boon to tens of thousands of my fellow-assistants. I enclose my name and address, and, apologising for troubling you, beg leave to subscribe myself,

Sir, your most obedient servant,

A WEST END ASSISTANT.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—I am very sorry to find that you are opposed to the bill now being introduced into Parliament by Sir John Lubbock for the earlier closing of shops.

I think the late hour system is a very great evil indeed, and I and many others find it so. Some who now close here at eight o'clock have to sacrifice a great deal of their custom through the selfishness of some who will keep their doors open until ten and eleven o'clock.

I consider the late hour system a complete state of slavery both to employers and employed, and from which (through the intense selfishness of certain individuals who are always ready to take advantage) we can never be emancipated except by legislation.

I am, Sir, Yours faithfully,

W. HAY.

Regent's-terrace, Anlaby-road, Hull,
May 22, 1873.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—Can I believe my eyes? for it seems too good to be true that a "Shop Hours' Regulation Bill," should be "quietly introduced into the House of Commons," as you state in your last issue.

I do not know *all* the provisions of the Workshops Act, and therefore will not presume to judge its merits as a whole, but most of those you state I warmly endorse, and would cheerfully give £5 to see them in full force; and before opposing the measure *in toto*, I think you will do well to know more of the feelings and interests of your subscribers on the subject.

It could involve no loss to the trade, as grocers and others would close too, and as to the medical *wants* of the public requiring us always at home, we have been frightened by that bogus all too long; for I am well satisfied, as one who has stuck long and close to business, that the public can, as a rule, satisfy their needs at a druggist's within the prescribed hours as easily as a banker's. Of course, where there is much dispensing, the principal or his assistant is always at hand, even on Sundays, and so much the more need of a half-day in the week, I say, for more recreation.

To many of us who can keep no assistant the Act would be an inestimable boon; for those, and those only who do attend their businesses closely and with success, can fully realize what that tie is, and I do hope, before opposing the bill, you will carefully weigh all its bearings in the interests of those you represent.

I should apologise for intruding on your attention, but the subject seems to me of more interest to the trade than the sale and registration of vermin killers for a penny!—What are we coming to?

Yours truly,

Debenham, May 19, 1873.

H. MULLINGER.

P.S.—I intend writing one of the Members, approving their intentions at least.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—In your second editorial of this month you draw attention to what you consider a serious matter affecting the trade—viz., the "Shop Hours Regulations Bill."

Will you permit an assistant to make a few candid remarks, on it?

I must own, when I read it I was much surprised, as I have always been under the impression that the leading feature of your Journal was the advocacy of any measure for the good of the trade; and in the leading features of the bill, as given by you, I see nothing but what is beneficial. You state that if the bill is passed, all shops are to be closed at 2 p.m. one day in every week. Why, this is just what is required! What time has an assistant for study after getting out at nine or ten o'clock?—time to go to bed then, I think, and let nature recruit itself after the fatigues of the day, instead of poring over books and falling asleep by the fireside.

Again, no persons under twenty-one years of age are to be employed after nine o'clock p.m., and quite right too, I say, and any liberal-minded person will concur with me in that.

As to closing on Good Friday and Christmas-day: these not being recognised in the North here, I can make no remark about them.

The usual cry of chemists against early closing is, that they must keep open, in case of any urgent prescription coming in.

Now, I maintain that for all practical purposes we may as well shut at the same hour as our neighbouring shopkeepers, and even should such a prescription come in as I have said, they can easily take it to the chemist's house, which is generally above the shop, or else close at hand, and get it dispensed. And, in conclusion, I think that the bill will prove more a blessing than a disaster to that important body, the chemists and druggists of Britain.

Lastly, Mr. Editor, do give a little consideration to the claims of the assistants. And with this hope

I subscribe myself,

AN EDINBURGH ASSISTANT.

Edinburgh, May 17, 1873.

PARTIAL FAILURES.

TO THE EDITOR OF THE "CHEMIST AND DRUGGIST."

SIR,—A very unfair rule has lately been passed in London, which affects assistants very much; viz., "no partial failures," and which is to the effect that if a candidate goes up for examination, and passes in everything except, say, "botany," he is "plucked," and is required to go through the whole again, if inclined to go up. No doubt he should be able to go through them all; but don't you think it would greatly benefit assistants if the Board abolished this rule, so that when a candidate has a partial failure, he could concentrate his future studies in the subjects failed in?

I, for instance, in January, went to Edinburgh for my examination, and passed *with credit* in all the subjects except Botany and Chemistry, so that I am as far away from the object of my studies as ever, for I have the whole to go through again.

Now in a place like this, where we have no classes, reading-rooms, etc., it is rather difficult to get up to perfection in botany (the use of which I don't know) and chemistry; but we might manage to pass muster if we had not the other subjects on our mind.

I see the Edinburgh Board met yesterday, when the retiring President said the number of failures were about 41 per cent., but that if the London (recent) rules were to be carried out the percentage would probably be more. Now what are *poor* assistants to look forward to?

I think assistants should look into this matter, then the Board might be induced to make the rules as they were in regard to "partial failures."

Helensburgh,

I am, yours, etc.,

13th May, 1873.

HENRY FOREWELL.

WORK AND WORRY.—From this text has proceeded much profitable hygienic discourse, of late, in some foreign journals. The conclusion reached is this: brain-work is conducive to health and longevity, while brain-worry causes disease and shortens life. The truth of the statement, and its application to what we see around us, is evident enough; yet it is well that such subjects should be continually discussed. Intellectual labour, although severe, like that performed by the judges of our highest courts, or by scholars and persons devoted to literary pursuits, if unmixd with excitement, and followed with regularity, is seen to promote bodily health and long life. On the other hand, mental cares, attended with suppressed emotions, and occupations which from their nature are subject to great vicissitudes of fortune and constant anxiety, break down the lives of the strongest. Every one has seen a class of men whose early mental training was deficient, and to whom the writing of memoranda was irksome, engaged in middle life in great undertakings, and taxing the memory with a mass of complicated business accounts, simply because they could more easily remember than write. Their power of memory for a certain kind of facts is often truly astonishing, but the strain is at last too much and they die before their time. The brain-worry of our school children might furnish useful illustrations of the truth of the same general proposition, but we forbear.—*Boston Medical and Surgical Journal.*



PARTNERSHIPS DISSOLVED.

BAINBRIDGE, JOHN, & Co., Tib-lane, Manchester, drysalters. March 31. FIRTH, MARSDEN, and BROWN, Wyke, Yorks, manufacturing chemists, April 5.

HATRICK, WILLIAM, & SONS, Paisley, wholesale and retail druggists, May 28. Debts by J. B. Hatrick, who continues the business.

RADFORD, SMITH, and MARLAND, trading as the Beswick Gelatine and Alkali Company, Bradford, near Manchester, chemist, May 6. Debts by Radford and Smith.

ROBERTS and SON, Shastebury, bookellers, manufacturers of soda-water, and chemists, April 18. Debts by Edwin Rogers Roberts.

SARGANT and BAILEY, Bletchingley and Godstone, surgeons. May 6.

SIMPSON and TOWNENT, Hackney-road, M.D.'s. May 16.

TAYLOR, W. R. & Co., Middlesborough, chemists. May 31. Debts by William R. Taylor.

DISCHARGE.

TAYLER, THOMAS PALMER, 101, Drury-lane, chemist. (The bankrupt was not possessed of any property which could be realized.) Bankruptcy closed April 23.

DIVIDENDS.

HEATON, EDWIN G. (Liq.), Liverpool, and Walton, near Liverpool, chemist. Div. 2s. 6d.; June 16, between 11 and 1; A. Ford, 31, The Temple, Dale-street, Liverpool.

HARDING, WILLIAM G. (Bkt.), Sudbury, Suffolk, chemist. Div. 2s. 6d.; E. J. Craske, Head-street, Colchester.

SCOTCH SEQUESTRATION.

STEWART, CHARLES, Hairless-hill, Larkhall; Lanark, physician and surgeon. May 16, with protection.

LIQUIDATIONS BY ARRANGEMENT OR COMPOSITION.

Notices have been issued of first general meetings in re the following estates:—

ARKHURST, WILLIAM EDWARD, 151, Balls-pond-road, late King Henry's-walk, Balls-pond-road, soda-water manufacturer, previously Lamb's Conduit-street, Holborn, chemist. May 5.

ANDERSON, ALFRED GEORGE, Ladbroke-grove-road, professor of chemistry. May 7.

BALLS, THOMAS CROWE, 2, Grange-road, Bermondsey, chemist. May 1.

CLARKE, JAMES HOWARD, 19, Lisle-street, Leicester-square, surgeon. May 27.

HALL, FREDERICK, Hertford, dentist. May 24.

HANDY, JAMES THOMAS, Chipping Sodbury, Gloucestershire, veterinary surgeon. May 7.

HOLLAND, WALTER, Waleall, chemist. May 12.

LEAFONO, WILLIAM, trading as C. GROSSMITH, 143, Strand, perfumer. May 31.

LUMSDEN, WILLIAM, Braunston, Northamptonshire, surgeon and ironmaster (separate creditors). May 26.

MAYNE, CHARLES, Milk-street, Bristol, druggist. May 2.

MEDLAND, JANE, trading as WILLIAM MEDLAND, 4, Brick-hill-lane, Upper Thames-street, and Bramley, near Guildford, manufacturing chemist. June 5.

NOCK, JAMES, Cradley Heath, near Brierly-hill, chemist, grocer, and wine and spirit dealer. May 26.

POOLE, GEORGE, 30, Bishop-street, late City-road, St. Paul's, both Bristol, dentist. May 8.

PRICE, JOHN COOK, 9, Sidney-place, Stamford-hill, surgeon. June 4.

ROBERTS, JOHN CHURCH, Yoxall, late Hamstall Ridware, Staffordshire, druggist. May 27.

STOCKEN, CHARLES, Eridge-villa, Tunbridge-wells, cattle medicine dealer. May 14.

TAYLOR, WILLIAM H., Marlborough-terrace, Penge, late Anerley, doctor. May 26.

TRINO, THOMAS, Bridgehouses, Sheffield, Yorkshire, druggist. May 13.

A PHYSICIAN'S DIARY OF BUSINESS.—A pocket diary has been picked up in the street, and now is in the finder's possession, awaiting its owner. From the following extracts, it appears the loser was a medical man:—

"Kase 230, Mary An Perkins. Bisnes, washwoman. Sickness in her hed. Fisik sum blue pils a soaperifik; age 52. Ped me one dollar, 1 kuarter bogus. Mind get good kuarter and mak her tak mo fisik.

"Kase 231, Tummes Krinks. Bisines, Nirishman. Lives with Pady Molouny whot keeps a dray—Sickness, digg in ribs and two blak eys. Fisik to drink my mixer twict a day of sasiperily bere and jellop, and fish ile, with asifidety to make it taste fisiky. Rubed his face with kart grese liniment, aged 39 years of age. Drunked the mixer and wuddnt pay me bekase it tasted nasty, but the mixer'll work his innards. I reckon.

"Kase 232, Old M'sses Boggs. Aint got no bisnes, but plenty of money. Sickness awl a humbug. Gav her sum of my celebrated 'Dipseforikon' which she sed drank like cold tee—wich it was too. Must put sumthink in it to mak her feel sik and bad. The Old Women has got the raks."—*The Sanitarian.*



REVISED TERMS.—Announcements are inserted in this column at the rate of one halfpenny per word, on condition that name and address are added. Name and address to be paid for. Price in figures counts as one word.

If name and address are not included, one penny per word must be paid. A number will then be attached to the advertisement by the publisher of the CHEMIST AND DRUGGIST, and all correspondence relating to it must be addressed to "The Publisher of the CHEMIST AND DRUGGIST, Colonial Buildings, Cannon-street, London, E.C.," the envelope to be endorsed also with the number. The publisher will transmit the correspondence to the advertiser, and with that his share in the transaction will cease.

FOR DISPOSAL.

Offers wanted for Four Tons Nitrate Soda. 17/55.

x 70 gallon Oil Cisterns with Taps and Lids. Scott, Gainsbro'.

5 gallon Galvanized Iron Cistern, complete, 40s. Coeher, Lynn, Norfolk.

A Full-sized Soda Water Machine, complete, new valve and pump, will be sold cheap. 33/54.

Southall's "Materia Medica." Specimens in good condition. 16s. S., 114, St. Aldates, Oxford.

Attfield's "Chemistry," Roseoe's "Chemistry," in good condition. G. W. Rome, Langholm.

Two dozen Leeming's Essence, 26s. Carriage paid. Fortune, Anstruther.

Lot of Photographic Apparatus, Lenses, etc., cheap. Stamp for reply. W. Sharpe, Madeley, Salop.

Five cwt. Senna, 2½d. per lb. Stamp for sample. C., 156, Spon-street, Coventry.

Materia Medica Cabinet, complete, in good condition. W. Dee, 25, Clarence-street, Cheltenham.

Bargain. British Pharmacopœia, 1867, quite new, cover soiled; 5s. Coleman, 160, High-street, Southampton.

Soda Water Machine, a bargain, Hayward Tyler's, No. 5, nearly new; offers wanted. 2/54.

Watson's "Practice of Physic" (in 2 Vols.), equal to new, 12s. 6d. H., 77, Bridge-street, Warrington.

About 28 lbs. Genuine Naples Soap. Send 2 Stamps for Sample. Owles and Son, Quay, Yarmouth.

Shower Bath in good condition, price 25s.; four small Pear-shaped Globes, cheap. Griffith, Slough.

Latest edition London Pharmacopœia (Latin). "Thresh," Mr. Walkden's, Conway-street, Birkenhead.

Percolator; also Electro-Magnetic Machine. Exchange for Mackintosh. 15/55.

Half-ounce Otto Virgin; two Marsden's Respirators: Lower Wisdom Tooth Forceps, 22s. George Walker, 43, Silver-street, Salisbury.

Medley's Ascending Douche. Invaluable for Hæmorrhoids. Cost £2 15s. Equal to new. Offers wanted. S. Smith, New Swindon.

Six Winchester's each Ol. Lavand, and Ol. Menth. (both Mitcham.) Offers wanted. George Philp, Chemist, Hill-street, Kirkcaldy.

Muspratt's "Chemistry," in sixty-three parts, quite new, cost 63s., will sell for 43s. Last edition. Edward Corfield, 27, Bennett's-hill, Birmingham.

A Hand Sewing Machine for a Four-grain Pill Machine. Dr. Atherton, 2, King's-road, Bedford-row, London, W.C.

"Chemical News," unbound, for 1868, 1869, and half 1867. Offers wanted. Venables on "Poisons" 1s. Crook, Chemist, Mirfield.

Counter Scales by De Grave, London; brass pillar, 15-inch French polished Mahogany stand, with drawer box-end beam, 20s. Sumners, chemist, Heckington.

Four handsome Chemists' Show Bottles; 8-gallon capacity; 21 smaller ones; £4 4s. The lot a bargain. B., 151, Hoxton-street, N.

Materia Medica Collection, Southall's, little handled, for sale. Cost 30s.; price wanted. Letters unanswered in four days not accepted. Palmer, 10, King-street, Dover.

A full-size India-Rubber Water Bed and Pillow, with wood couch on castors to fit, only used twice, equal to new. £8 or offers. E. B. Strutt, Chemist, Saltley, Birmingham.

Books required to pass the Preliminary Examination; good condition; 5s. the lot, cost 10s. S. Gilbert, 28, Queen-street, Exeter.

Very cheap the Shelving of a Chemist's Shop, Cornice, Pilasters, and Front of Shelves Grained Oak. Also about 80 Mahogany-fronted Gold-labelled Drawers. Address, Mr. John Kemp, Chemist, Lincoln.

Wide and narrow mouthed Gold-labelled Shop Rounds, Engraved Aids; Iron Mortar; Sundries; Largest size Bust of Hahnemann. Cole, Chemist, Stoke Newington.

Binocular Microscope, first-class, quite new, with Polariscopes and other apparatus, in handsome polished mahogany cabinet. Only £10 10s. Apply, B., 151, Hoxton-street, N., London.

Evans' Cabinet Materia Medica, new, 35s., or highest offer; 100 Specimens Dried Plants, beautifully mounted, classed, and named, 5s. B., Cleobury Mortimer, Bewdley.

A complete set of the "Pharmaceutical Journal," from its commencement. First series bound. All perfect and in good condition. M. P. S., Mr. J. W. Wade's, Litherland, near Liverpool.

A Vulcanizer, very little used, with two flasks; Gas Lamp and Thermometer, guaranteed sound. Cost £4; price £2 15s. cash, or exchange to £1. Also various tools. Squires' Companion to Pharmacopœia, wanted. J. C. Nosworthy, Chemist, Barnstaple.

Three 20-lb. Jars of English Honey, last year's; 36 1-lb. Jars of English Honey; 40 lbs. in bulk English Honey; 20 lbs. English Beeswax; four dozen 12 oz. Bottles of an excellent Sauce; half a ton of Lump Oeher. Ellwood, Chemist, Leominster.

Half-dozen Green I. R. Breast Exhausters (Maw); Quantity Homœopathic Medicines, a bargain; 1½ cwt. French Chalk in convenient pieces for retail; 2 Solid Leather Cases, nearly new, suitable for a wine merchant, six and ten partitions respectively; 6 lbs. Ext. Aloes. Aquosav. H., 43, Bury New-road, Manchester.

Cheap Dispensing Bottles, perfectly clean, 1 oz. to 8 oz. inclusive, 8s. per gross; 10 oz. and 12 oz., 10s. per gross; Long, Brown Quinine Wine Bottles, 1s. per doz. Quart and Pints. All Orders to be accompanied with remittance. J. Whitehead, 9, Pinder-street, Hulme, Manchester.

Two Specie Jars, handsome coat of arms, gold labelling, ornamental covers, 26-in. high, 13-in. diameter, 30s. each; twelve handsome 8-lb. Shop Pots, olive, gold labels, new, 4s. each, cost 5s. 9d.—offers wanted; Guinea Pill Machine, 24 5-gr., new, 12s. 6d.; Octagon Lamp, lately gilt and painted, £6 10s. Turner, Totterdown, Bristol.

One valuable Nest of 32 Mahogany Drug Drawers, with Glass Labels and Knobs, 8 Lockers under, with Mahogany Shelving over; also 250 Bottles and Jars, labelled. Length of Drawers and Shelving, 17 ft.; Height, with Lockers, 4 ft. 8 in.; very handsome and nearly new, to be sold cheap. Apply, Walter Hall, Stanley-terrace, Batley.

Two Sets of Clendon's Best Circular Joints in Strong Morrocco Pouch (new), 44s.; two Gas Stoves (cheap); Galvanic Battery and Coil of Superior Make, in Mahogany Box, with Lock and Key, 25s.; Muspratt's work on "Chemistry," complete, unbound, 38s.; Barth's Gas Apparatus, £3; Address J. G., 14, Netherthorpe-street, Sheffield.

Glass Fanlight, mahogany frame, gilt scroll lettered Medical Establishment; size 36 inches by 20 inches, 12s. 6d.; 48 5-grain Pill Machine, 21s.; Scales and Weights for Dispensing (Fig. 7) Maw's, 17s., nearly as good as new; Step Stands for Window or Counter. All the above articles in good condition. Wanted, Soda Water Stand. J. W. C., Chemist, Madeira-place, Torquay.

Perfect Leech Aquarium, 11s., 16-in. diameter, with metal top, Maw's Illustrations, p. 125; Shillcock's Leech Vase for 50 (bottom diaphragm off), been used for three months, 11s.; counter scales, 35s., 16-inch French polished box, box-end beams, Maw's Illustrations, Fig. 1, page 143—perfect condition; Cigar Case, 25s., first-rate condition, six compartments, Maw's Illustrations, page 166, Fig. 53. George Durrant, Hertford.

An American Waistcoat-pocket Pistol, breechloader, rifled bore, quite new, very powerful, with eighty Cartridges, 15s.; latest edition of Tomes' "Dental Surgery," quite new. Cost 15s.; price 9s. 6d.; "Manual for Apothecaries' Hall," 5s. 6d.; Snell on "Debility and Defective Nutrition," new, 2s. 6d.; Acton on the "Reproductive Organs," new. Cost 12s.; price 8s.; Graham's "Elements of Chemistry." Cost 25s.; price 15s. A. Bolton, Chard, Somerset.

Roscoe's "Chemistry," Chambers' "Latin Grammar," Fowne's "Chemistry" (10th edition); Attfield's "Chemistry," 1869; offers in cash. Cooper's "First Lines in Surgery," 2s. 6d.; Gregory's "Medicine," 2s. 6d.; Grant's "Anatomy," 2s.; Bell's "Anatomy" (3 Vols.), 4s. 6d.; Miller's "Physiology" (Vol. 1), 1s.; Cooper's "Surgical Dictionary," 3s. 6d.; Johnson on "Climates," 1s.; Henry's "Chemistry" (2 Vols.), 2s. W. D. S., Stamp Office, Bromley, Kent.

"The Intellectual Observer" (Vols. 1, 2, 3); Griffin's "Radical Theory of Chemistry," "Paris' Pharmacologia," Cooley's "Cyclopædia of Receipts," etc.; Fullerton's "Family Bible and Complete Commentary" (2 Vols.), Cost £6; all in first-rate condition. Spray Producers (Clarke's and Richardson's); Rimmel's Fountain (Storer's Patent), No. 1; 2-Pint and 3-Pint Brier's Gazogene; 14 lb. Finest Deep Vermilion; 5 Gross 1d. Davis's Polish for Metals; 2 One Guinea Set Croquet (new). Office, X., Stroud.

Bell Metal Mortar and Pestle, holds 4 pints, weighs 21½ lbs., 20s. with Wood Stand; 2 doz. Macintosh Sponge Bags, 8½ by 6 in., 2 doz. ditto, 8 by 5 in., 4s. per doz.; 1 doz. ditto, 5 by 4 in., 1½ doz. ditto, 5 by 5 in., 3s. per doz.; 2 x 28 lb. tins Thomas' Sheep Ointment, 1s. per lb.; Machine for Cutting Tin or Sheet Iron, suitable for a Mustard Packer, 42s.; Standard Imperial Measure, Copper, Spirit Shape, with large Tap, weighs 31 lbs.; 200 lbs. Pale Guttae Sang. Draconis, soluble in spirit, 1s. per lb. Wiggins, Ipswich.

6 doz. Cooper's Neuralgine at 7s. per doz.; 1 doz. Platt's Syrup of Horehound, 8s.; 1½ doz. Woodcock's Pectoral Cough Pills, 7s.; 1 doz. Walsh's Castor Oil Pills, 7s.; ½ doz. James's Febric Powder, 1s.; 1½ doz. Powell's Balsam of Aniseed, 8s.; 1 doz. Turner's Tamarind Emulsion, 8s.; 1 doz. Bagley's Herbaceous Pills, 4s. 9d.; ½ doz. Townsend's Sarsaparilla, 4s. size, 30s.; 4 9s. bottles Rooke's C. L. Oil, 5s. 6d.; 7lb. Rad. Rhei E.L., worth 5s., 3s. 6d.; and small quantities of several kinds of patents at low prices. All orders to be accompanied by remittance. M. Cooper, Church.

Large Stock of Drugs, Chemicals, Sundries. Cash or Barter. Six handsome Gold-labelled Specie Jars, 20, 22, and 24 inches high, Mahogany Stands; two 8 and four 3-gallon Carboys, Cut Glass Stoppers; one 2-dozen Pill Machines; Upright Mahogany Show Case, Folding Glazed Doors, 2 ft. 6 by 2 ft. 3 by 5 inches; quantity Pint and Quart Shop Bottles. Terra Cotta Figure. Pedestal; Soda Water Stands; Cockle's, Norton's, Whelpton's, Holloway's Parr's, Scott's, Powell's, Steedman's, Browne's Chlorodyne, Troche's, Winslow's, Allcock's, 9s. per dozen; Stedman's, 6s. 9d.; Lamplough's 23s. 6d.; Allen's, 42s.; Mexican, 24s.; Floriline, 20s.; Zylbalsamum, 24s. Rayner, 309, New North-road, Islington.

N.B. We accidentally omitted to book the name of the gentleman, who made the announcement in last month's Exchange Column, under the figures 21/21. We were therefore compelled to return the replies to it which reached us. Will the advertiser be good enough to write us, and we will rectify the error?

WANTED.

Few 40-oz. Oil Bottles, tin caps. Portbury, Devizes.

Galvanized Iron Cistern for Petroleum, 100-gallon. Squire's "Companion," latest edition. 14/54.

Lescher's "Elements." State price. Walker, Town-Hall, Settle.

Beasley's "Formulary," latest edition. Condition no object. Lowest price, to H. Lloyd, Totnes.

Sea Medicine Chests; Tooth Forceps, by Evrard or Collins; 3iij. Pomade Bottles, boxwood corks. 30/54

British Pharmacopœia, 1867. State condition and price to A. F. Horne House, Ilfracombe.

Lescher's "Elements," last edition. State price and condition. Lea, Post-office, Oundle.

A large number of Packages, either wood or tin, suitable for Store-Boxes. W. A. Wood, Hunslet.

Plate-glass Shelves; Pill Machine, Reversible Plate; Upright Glass Case. State lowest price to Bygott, Huddersfield.

Gibton's Worm Powders. Send price and quantity to E. Taylor, Droitwich.

Galvanized Iron Vats not less than 100-gallons each, with good taps and covers, suitable for Petroleum. Wiggins, Ipswich.

CHEMIST AND DRUGGIST for January and February, 1870. State price. G. B. Key, 9, North Hanover-street, Glasgow.

Three or four Show Jars and four pear-shaped Carboys for windows. State particulars. J. Ruston, M.P.S., Maryport.

A good second-hand Front Counter, 10 feet long, with Drawers, one ditto, 4 feet long; a Nest of Drawers 12 feet; ditto; 6 or 8 feet. State condition and lowest price. Jenkinson, chemist, Sheffield.

Iron Cistern from 40 to 80 gallons, suitable for paraffine or turpentine. Also 1 or 2-gallon Black Stock Bottles for top shelf in shop. Apply to Jno. Betts, chemist, Woodbridge.



IT speaks well for the sound state of British commerce when we find it going steadily on, comparatively unaffected by the startling events which political and financial disturbers are now perpetually stirring up. The revolution in France, effected happily without bloodshed, is not altogether satisfactory to those who wish to see a settled condition of affairs in our neighbouring land. It is impossible to suppose that with the country growing more and more republican every day, a violent rench of the Executive towards Monarchy can lead to permanence or solidity. A more disturbing element than Marshal MacMahon's election to the supreme power at Versailles has been the severe financial crisis in Vienna, which also affected Berlin and more or less the whole of Germany. This has no doubt had a serious effect on English export trade. Germany is a customer of continually growing importance, and the relations between the two countries are annually becoming more intimate. Besides these events, we have had at home the Whitsuntide holidays, including the Bank holiday on Whit Monday—which latter was most rigorously observed in the City—and the Derby. The wonder is that trade has been able to make any way at all.

The continuance of dulness is the chief feature which has characterized the chemical markets since we last wrote. The occurrence of the Whitsuntide holidays, which are always so well respected in the Lancashire district, was a welcome relief to the large chemical factories in that county, for it is unquestionable that the demand for their staples is not up to the expectations. There is a languor in nearly all the branches of the chemical trade, which it is not quite easy fully to account for. Still it may be taken as true that the liveliness of business last year induced a frequency of speculation which was not in all cases justified. It consequently happens this year more generally than usual, that parcels are to be picked up from weak holders at a shade less than the market price. This prospect, however, cannot by any means be depended upon.

The following figures have been published by Messrs. Berger, Spence, and Co., and indicate how considerably the export demand for our chief chemical has fallen off this year. It must be remembered too that the dulness has almost entirely fallen on the second two months of the year.

Exports of Alkali in Tons to	Germany.	France.	U. States.	Total.
From January to April, 1872	10,249	2,256	30,425	70,582
„ Sept. to Decem., 1872	13,025	572	37,858	76,353
„ January to April, 1873	8,433	524	40,723	68,233

The chief staples are in nearly every case easier on the market. Iodine is quoted at the price of last month; but even in this product there is no disposition to purchase, and it is said that holders are not unwilling to recede a point in order to effect a sale.

Tartaric Acid is dull at 1s. 6½d. to 1s. 6¾d.; Citric ditto, at 4s. 5½d.; Oxalic ditto, at 9d.; Chlorate of Potash has been pressed on the market, and sales made at 1s. 5d. to 1s. 6d. Advices from the West Coast intimate that the Peruvian Government has not ventured to carry out its designs with regard to Nitrate of Soda at least for the present. The one exception to the universal flatness is in the case of Quicksilver, which is very firm at £13 17s. 6d. per bottle. There is a humorous idea "on 'Change" that the result of the Derby may, and sometimes does, affect the price of Mercury. If there is any truth in this notion, it would seem that Doncaster was not the animal on which "the Baron's "

hopes were fixed, as it is since that gentleman's victory hat the price of the metal has stiffened. Baron Rothschild regards the quicksilver profits as his "pocket-money," and as he nets about a hundred per cent. on all he sells, on the average, the little extra is supposed to be worth some two hundred thousands per annum. As we said, the price is very firm just now, and a buyer of 500 bottles, who offered £13 15s. the other day, was not accommodated.

There have been two drug sales since our last, and business has been fairly active, prices being firm. Our most recent communications from Smyrna are not quite so favourable to the prospects of the Opium season as formerly, and it is noted that holders are firm, but prices are unchanged. Balsam of Capivi is still held tightly, and at last sales four casks of good quality were bought in at 3s. We have previously reported that the price of this commodity has been "bulled" by a "ring" in New York.

By telegram from Calcutta we have serious reports in respect of Indigo, the crop of which is said in many parts of Bengal to be suffering from drought. These telegrams and reports of drought are the one thing certain in the indigo trade. They serve their purpose, no doubt, and sometimes they are true enough to a certain extent. But nervous holders might be led by some of them to anticipate a total collapse in the trade.

Camphor is in good stock, and there is not an abundant demand. Nevertheless it has been well held until recently. A few sales have been made at lower prices, and now the tendency is decidedly downward.

Castor Oil is offered in but small quantities, and there is sufficient demand to keep the prices very firm. Cod Liver Oil, as we anticipated, has advanced. Olive is still disregarded, but at present rates sellers, no less than buyers, avoid the market.

The recent Pepper speculation, which was carried out with as much vigour as any recent disturbance, has not had quite such a prosperous career as it deserved. No doubt a good bit of money was turned over, but the wire-pullers never seemed to get the control of the market so completely as they aimed at. The occasion of the diversion was the repulse of the Dutch by the Acheenese, a warlike race whose territory is situated to the north of Sumatra, and who are largely occupied in pepper growing, and the consequent blockade of the Acheenese ports. The probability of a short supply, therefore, induced some speculators both in London and New York to invest on what was in stock, and they succeeded in lifting the figures at one time nearly 2d. per pound. A telegram has recently been received stating that some of the native tribes of West Sumatra are selling off all their pepper and going to the aid of the Acheenese. If this report is true it will probably inconvenience the speculators.

American Turpentine has again declined, and now stands at the very low figure of 36s. Petroleum too has been largely sold at a further reduction, and is now quoted at 1s. 1½d. to 1s. 2d.

Condurango is still regularly put up at the drug sales, and more singular still, it occasionally finds a customer. At the sales on May 22nd, ten serons were sold at prices varying from 9s. down to 1s. 9d. per cwt. One may wonder what are the "points" which determine the variation of prices, for as far as we know, the only virtue of the herb is its capacity for burning; and we presume the one-and-ninepenny article will answer this purpose as well as the nine-shilling parcel.

The ship *Tennyson*, from Calcutta for Boston, foundered at sea on the 22nd February last. Among her cargo were 4,400 bags and 4,700 pockets linsced, 321 cases gum shellac, 31 cases button lac, 188 cases indigo, and 13 bales safflower.

Monthly Price Current.

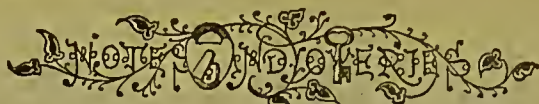
The prices quoted in the following list are those actually obtained in Mining-lane for articles sold in bulk. Our Retail Subscribers must not expect to purchase at these market prices, but they may draw from them useful conclusions respecting the prices at which articles are offered by the Wholesale Firms.

CHEMICALS.

	1873.		1872.	
ACIDS—	s. d.	s. d.	e. d.	s. d.
Acetic per lb.	0 4½ to	0 0	0 4½ to	0 0
Citric	4 6 ..	0 0	3 8 ..	0 0
Hydrochlor. per cwt	4 0 ..	7 0	4 0 ..	7 0
Nitric per lb.	0 5 ..	0 5½	0 5 ..	0 5½
Oxalic	0 9 ..	0 9½	1 1½ ..	1 2
Sulphuric	0 0½ ..	0 1½	0 0½ ..	0 1
Tartaric crystal ..	1 0½ ..	0 0	1 7 ..	1 7½
powdered ..	1 6½ ..	0 0	1 7½ ..	0 0
ANTIMONY ore.....per ton	220 0 ..	240 0	270 0 ..	290 0
crude ..per cwt	40 0 ..	42 0	40 0 ..	0 0
regulus.	0 0 ..	0 0	0 0 ..	0 0
star	60 0 ..	61 0	72 0 ..	75 0
ARSENIC, lump.....	20 6 ..	0 0	18 6 ..	0 0
powder.....	10 3 ..	0 0	7 6 ..	0 0
BRIMSTONE, rough ..per ton	125 0 ..	145 0	145 0 ..	150 0
roll ..per cwt	10 0 ..	0 0	10 0 ..	0 0
flour.....	11 6 ..	12 6	12 0 ..	12 6
IONINE, dry	1 7 ..	0 0	1 11 ..	0 0
IVORY BLACK, dry..per cwt.	8 6 ..	0 0	8 6 ..	0 0
MAONESIA, calcined..per lb.	1 6 ..	0 0	1 2 ..	1 3
MERCURY..... per bottle	275 0 ..	230 0	210 0 ..	0 0
MINUM, red	25 6 ..	0 0	21 3 ..	21 6
orange	35 6 ..	0 0	31 6 ..	32 0
PRECIPITATE, red ..per lb.	4 8 ..	0 0	3 7 ..	0 0
white ..	4 7 ..	0 0	3 5 ..	0 0
PRUSSIAN BLUE	0 0 ..	0 0	0 0 ..	0 0
SALTS—				
Alum	162 6 ..	0 0	160 0 ..	170 0
powder	182 6 ..	0 0	180 0 ..	0 0
Ammonia:				
Carbonate	0 7½ ..	0 7½	0 7 ..	0 7½
Hydrochlorate, crude,				
white..... per ton	640 0 ..	0 0	080 0 ..	630 0
British (see Sal Ammoniac)				
Sulphate	350 0 ..	360 0	430 0 ..	440 0
Argol, Cape	87 0 ..	96 0	72 0 ..	90 0
Franco	75 0 ..	85 0	63 0 ..	70 0
Oporto, red ..	32 0 ..	32 6	35 0 ..	37 6
Sicily	00 0 ..	65 0	67 6 ..	70 0
Aebes (see Potash and Soda)				
Bleaching powd.	12 6 ..	12 9	14 0 ..	14 6
Borax, crude	50 0 ..	95 0	60 0 ..	75 0
Britiab refud.	105 0 ..	0 0	95 0 ..	0 0
Calomel	4 3 ..	0 0	3 4 ..	0 0
Copper:				
Sulphate	31 6 ..	32 0	33 0 ..	34 0
Copperas, green ..per ton	60 0 ..	62 0	60 0 ..	62 0
Corroisive Sublimate ..p.lb.	8 10 ..	0 0	2 3 ..	2 0
Cr. Tartar, French, p. cwt.	107 6 ..	0 0	110 0 ..	112 6
brown ..	90 0 ..	97 6	97 6 ..	100 0
Epsom Salts	5 9 ..	6 3	5 9 ..	6 3
Glauber Salts	5 6 ..	6 6	4 6 ..	6 0
Lime:				
Acetate, white, per cwt.	16 0 ..	22 0	14 0 ..	22 6
Magnesia: Carbonate ..	42 6 ..	45 0	42 0 ..	45 0
Potash:				
Bichremate	0 8½ ..	0 0	0 8 ..	0 0
Carbonate:				
Potashes, Canada, 1st				
sort ..per cwt	38 0 ..	38 6	41 0 ..	0 0
Pearlashes, Canada, 1st				
sort ..per cwt.	51 0 ..	0 0	50 0 ..	0 0
Chlorate	1 6 ..	0 0	1 8 ..	0 0
Prussiate	1 4½ ..	0 0	1 7 ..	0 0
red	3 1 ..	0 0	3 1 ..	3 2
Tartrate (see Argol and Cream of Tartar)				
Potassium:				
Chloride	8 0 ..	0 0	9 9 ..	10 0
Iodide	25 6 ..	0 0	35 0 ..	0 0
Quinine:				
Sulphate, British, in				
bottles	8 0 ..	0 0	7 9 ..	0 0
Sulphate, French ..	7 0 ..	0 0	7 6 ..	0 0
Sal Acetos	1 1½ ..	0 0	1 4½ ..	0 0
Sal Ammoniac, Brit. cwt.	44 0 ..	45 0	43 0 ..	49 0
Saltpetre:				
Bongal, 0 per cent or				
under ..per cwt.	26 9 ..	27 6	28 3 ..	29 0
Bongal, over 6 per cent.				
por cwt.	25 0 ..	26 6	27 6 ..	28 0
British, refined ..	80 6 ..	31 6	32 9 ..	33 9
Soda: Bicarbonate, p. cwt.	13 3 ..	0 0	10 3 ..	16 0
Carbonate:				
Soda Aeh. per dog.	0 2½ ..	0 3	0 3 ..	0 0
Soda Crystals per ton	122 6 ..	130 0	130 0 ..	0 0
Hyposulphite ..per cwt	15 6 ..	16 0	10 0 ..	17 0
Nitrate	14 0 ..	15 0	16 0 ..	16 0
SUGAR OF LEAD, White, cwt.	48 0 ..	0 0	45 0 ..	0 0

	1873.		1872.	
	s. d.	e. d.	s. d.	s. d.
SUGAR OF LEAD, Brown, cwt.	10 0 to	0 0	31 0 to	0 0
SULPHUR (see Brimstone)				
VERDIORIS	1 1½ ..	1 2	1 1 ..	1 3
VERMILION, English..	4 2 ..	4 4	3 6 ..	3 8
China.....	4 2 ..	4 3	4 0 ..	4 3
DRUGS.				
ALGES, Hepatic....per cwt.	0 0 ..	200 0	100 0 ..	240 0
Socotrine ..	110 0 ..	320 0	160 0 ..	460 0
Cape, good..	30 0 ..	34 0	27 0 ..	23 0
Inferior ..	20 0 ..	29 0	22 0 ..	26 0
Barbadoes ..	70 0 ..	190 0	75 0 ..	200 0
AMBERGRIS, grey..... oz.	30 0 ..	39 0	24 0 ..	29 0
BALSAM —				
Canada	3 0 ..	0 0	1 6 ..	0 0
Capiwi	2 11 ..	3 0	2 5 ..	0 0
Peru	9 0 ..	9 3	9 4 ..	9 6
Tolu	1 11 ..	2 0	1 9 ..	1 11
BARKS—				
Canella alba ....per cwt.	15 0 ..	25 0	15 0 ..	25 0
Cascarilla.....	26 0 ..	35 0	22 0 ..	37 0
Peru, crown & grey per lb.	1 0 ..	2 10	1 6 ..	3 1
Calisaya, flat ..	3 4 ..	3 6	3 2 ..	3 4
quill ..	3 3 ..	4 0	3 2 ..	3 4
Carthagea ..	0 10 ..	1 8	0 10 ..	2 0
Pitayo	0 0 ..	2 0	0 0 ..	1 10
Red	1 10 ..	6 0	1 10 ..	6 0
Buchu Leaves ..	0 2 ..	1 0	0 4 ..	1 4
CAMPORIS, China.. per cwt.	76 0 ..	77 0	86 6 ..	87 6
Japan	85 0 ..	0 0	87 0 ..	0 0
Refin Eng. per lb.	1 3 ..	0 0	1 4½ ..	0 0
CANTHARINES	6 0 ..	6 6	7 0 ..	7 3
CHAMOMILE FLOWERS p. cwt	45 0 ..	75 0	45 0 ..	70 0
CASTOREUM	6 0 ..	20 0	3 0 ..	30 0
DRAGON'S BLOON, p. cwt.	110 0 ..	240 0	100 0 ..	220 0
FRUITS AND SEEDS (see also Seeds and Spices)				
Anisee, China Star pr cwt.	120 0 ..	127 6	130 0 ..	132 6
Spanish, &c.	20 0 ..	42 0	35 0 ..	40 0
Beans, Tonquin .. per lb.	3 7 ..	3 9	1 0 ..	1 8
Cardamoms, Malabar				
good ..	4 6 ..	7 6	7 0 ..	7 6
inferior ..	3 3 ..	4 0	0 0 ..	6 9
Madras ..	1 2 ..	4 6	2 6 ..	7 0
Ceylon ..	4 9 ..	5 0	4 0 ..	4 3
Cassia Fistula. per cwt.	10 0 ..	20 0	12 0 ..	30 0
Castor Seeds ..	5 0 ..	10 0	10 0 ..	12 0
Cocculus Indicus ..	15 0 ..	20 0	18 0 ..	20 0
Colocynth, apple. per lb.	0 4 ..	0 9	0 3 ..	0 6
Croton Seeds .. per cwt.	52 0 ..	55 0	54 0 ..	58 0
Cubebs	33 0 ..	35 0	25 0 ..	28 0
Cummin.....	25 0 ..	26 0	42 0 ..	50 0
Dividivi	12 0 ..	15 6	16 6 ..	17 0
Fenugreek.....	9 0 ..	23 0	12 0 ..	22 0
Guinea Grains ..	25 0 ..	26 6	47 0 ..	50 0
Juniper Berries ..	9 0 ..	10 6	11 0 ..	12 6
Myrabolans	9 0 ..	14 0	12 0 ..	17 6
Nux Vomica	13 0 ..	17 6	10 6 ..	13 6
Tamarinde, East India ..	5 6 ..	18 0	2 0 ..	14 0
West India, now ..	38 0 ..	42 0	20 6 ..	39 0
Vanilla, large per lb.	70 0 ..	80 0	45 0 ..	55 0
inferior ..	35 0 ..	67 0	27 0 ..	43 0
Wormseed .. per cwt.	0 0 ..	0 0	0 0 ..	0 0
GINGER, Preserved, in bond				
(duty 1d. per lb.) per lb.	0 6 ..	0 9	0 6½ ..	0 10½
GUMS (see separate list)				
HONEY, Chili per cwt.	23 0 ..	38 0	38 0 ..	50 0
Cuba	0 0 ..	0 0	35 0 ..	50 0
Jamaica ..	35 0 ..	40 0	32 0 ..	50 0
Australian ..	20 0 ..	30 0	30 0 ..	45 0
IPÊCACUANHA per lb.	3 6 ..	4 0	5 6 ..	5 8
ISINGLASS, Brazil..	3 2 ..	5 0	2 6 ..	4 6
Tongue sort ..	3 5 ..	5 5	3 3 ..	5 8
East India ..	2 0 ..	4 4	1 4 ..	4 3
West India ..	4 6 ..	4 10	3 19 ..	5 2
Russ. long etable ..	8 0 ..	12 6	6 0 ..	9 6
leaf ..	3 0 ..	7 6	3 6 ..	6 6
Simovia ..	2 6 ..	4 6	2 0 ..	3 6
JALAP, good	1 0 ..	2 0	1 6 ..	2 8
infer. & steme ..	1 2 ..	1 4	0 6 ..	1 5
LEMON JUICE	0 2½ ..	0 0	0 2 ..	0 2½
LIQORICE, Spanish per cwt.	0 0 ..	0 0	35 0 ..	37 0
Italian ..	60 0 ..	90 0	40 0 ..	60 0
Liquorice Root ..	10 0 ..	15 0	0 0 ..	0 0
MANNA, flaky per lb.	2 6 ..	3 3	3 3 ..	3 6
small.....	1 4 ..	1 6	1 10 ..	2 0
MUSK, Pod	20 0 ..	43 0	20 0 ..	50 0
Grain	55 0 ..	55 0	0 0 ..	0 0
OILS (see also separate List)				
Almond, exposed per lb.	1 0 ..	0 0	1 1 ..	0 0
Castor, 1st pale	0 6 ..	0 0	0 5½ ..	0 0
second ..	0 5½ ..	0 0	0 3 ..	0 4½
infer. & dark ..	0 5 ..	0 0	0 4½ ..	0 5
Bombay (in casks) ..	0 4½ ..	0 0	0 4½ ..	0 4½
Cod Liver .. per gull.	4 6 ..	6 6	4 6 ..	5 0
Crotou.....por oz.	0 3 ..	0 4	0 3½ ..	0 4½
Essential Oils:				
Almond	30 0 ..	0 0	35 0 ..	0 0
Aniso-seed	9 3 ..	9 6	11 0 ..	0 0
Bay	0 0 ..	0 0	65 0 ..	70 0
Bergamot	9 0 ..	20 0	8 0 ..	15 0
Cajoput, (in bond) por oz.	2 5 ..	0 0	0 0 ..	0 0
Caraway	5 6 ..	6 3	5 6 ..	6 3
Cassia	6 0 ..	6 3	6 0 ..	0 0
Cinnamon	0 8 ..	3 6	0 10 ..	6 6
Cinnamon-leaf ..	0 3 ..	0 3½	0 4 ..	0 6
Citronelle	0 3 ..	0 2	0 21 ..	0 2½

1873.				1872.				1873.				1872.				
Essential Oils, continued:—				s.	d.	s.	d.	s.	d.	s.	d.	Oils, continued:—				
Clove.....per lb.	5	0	to	5	6	0	0	to	0	0	WHALE, South Sea, pale, pertun	37	0	to	0	0
Juniper.....	1	9	..	2	0	1	3	..	2	4	" yellow "	36	0	..	0	0
Lavender.....	2	0	..	5	6	3	6	..	6	0	" brown "	33	0	..	0	0
Lemon.....	10	0	..	19	0	5	0	..	15	0	East India, Fish "	27	15	..	28	0
Lemongrass....per oz.	0	3½	..	0	3½	0	5	..	0	0	OLIVE, Gallpoll....per ton	43	0	..	0	0
Neroli.....	0	5	..	0	6	0	5	..	0	6	Trlosto.....	41	0	..	0	0
Nutmeg.....	0	7½	..	0	8½	0	4	..	0	7½	Levant.....	39	0	..	0	0
Orange.....per lb.	7	0	..	12	0	7	0	..	8	0	Megador.....	38	0	..	0	0
Otto of Roses...per oz.	18	0	..	27	0	12	0	..	21	0	Spanish.....	40	0	..	0	0
Patchouli.....	3	9	..	4	0	4	0	..	4	3	Sicily.....	40	0	..	0	0
Peppermint:											COCOANUT, Cechin....	39	0	..	0	0
American....per lb.	15	3	..	16	8	13	0	..	14	0	Ceylon.....	34	0	..	0	0
English.....	29	0	..	34	0	80	0	..	33	0	Sydney.....	28	0	..	33	10
Rosemary.....	1	0	..	1	10	1	9	..	2	0	GROUND NUT AND GINGOLLY:					
Sassafras.....	2	6	..	3	8	3	0	..	3	6	Bombay.....	0	0	..	0	0
Spearmint.....	6	0	..	20	0	4	0	..	16	0	Madras.....	26	0	..	0	0
Thyme.....	1	10	..	1	11	1	10	..	2	0	PALM, fine.....	39	0	..	39	10
Mace, expressed..per oz.	0	2	..	0	3	0	1½	..	0	3	LINSEED.....	33	10	..	0	0
Opium, Turkey....per lb.	24	0	..	25	0	19	0	..	20	0	RAPESEED, English, pale..	39	15	..	0	0
inferior.....	12	0	..	20	0	12	0	..	19	0	brown.....	37	10	..	0	0
QUASSIA (bitter weed) per ton	90	0	..	100	0	80	0	..	85	0	Foreign pale.....	41	0	..	0	0
RHUBARB, China, good and											brown.....	0	0	..	0	0
fine.....per lb.	2	9	..	5	9	2	3	..	6	0	COTTONSEED.....	28	10	..	29	0
Good, mid. to ord..	0	10	..	2	6	0	3	..	2	0	LARD.....	45	10	..	0	0
Dutch trimmed..	8	0	..	10	0	9	0	..	9	6	TALLOW.....	31	0	..	0	0
Russian.....	0	0	..	0	0	0	0	..	0	0	TURPENTINE, American, eks.	26	0	..	0	0
ROOTS—Calumba....per cwt.	17	0	..	20	0	23	0	..	40	0	French,.....	39	0	..	39	6
China.....	16	0	..	18	0	22	0	..	23	0	PETROLEUM, Crude.....	s.	d.	..	s.	d.
Galangal.....	18	0	..	22	0	16	0	..	19	0	refined, per gall.	1	1½	..	1	2
Gentian.....	18	0	..	0	0	20	0	..	22	0	Spirit.....	0	10	..	0	0
Hellebore.....	30	0	..	33	0	30	0	..	32	0	SEEDS.					
Orris.....	36	0	..	80	0	65	0	..	75	0	CANARY.....per qr.	46	0	..	50	0
Pellitory.....	38	0	..	39	0	60	0	..	63	0	CARAWAY, English per cwt.	40	0	..	44	0
Pink.....per lb.	0	10	..	1	0	0	9	..	1	3	German, &c.....	23	0	..	36	0
Rhatany.....	0	6	..	1	4	0	4	..	0	11	CORIANDER.....	13	0	..	19	0
Seneca.....	4	6	..	5	0	4	11	..	5	0	HEMP.....per qr.	40	0	..	44	0
Snake.....	1	2	..	1	3	1	2	..	0	0	LINSEED, English per qr..	58	0	..	68	0
SAFFRON, Spanish..	22	0	..	28	0	27	0	..	38	6	Black Sea & Azof	60	0	..	60	6
SALEP.....per cwt.	170	0	..	180	0	170	0	..	200	0	Calcutta.....	63	3	..	63	6
SARSAPARILLA, Lima per lb.	0	6	..	0	7	0	8	..	0	11	Bombay.....	64	6	..	0	0
Para.....	1	3	..	0	0	1	0	..	1	3	St. Petersbg.,	60	0	..	61	0
Honduras.....	1	1	..	1	8	1	2	..	1	8	Mustard, brown..per bshl.	13	0	..	16	0
Jamaica.....	2	0	..	2	4	1	7	..	2	11	white.....	8	0	..	9	0
SASSAFRAS.....per cwt.	0	0	..	0	0	0	0	..	0	0	POPPY, East India per qr.	61	0	..	0	0
SCAMMONY, Virgin..per lb.	26	0	..	31	0	26	0	..	32	0	SPICES.					
second & ordinary	14	0	..	25	0	10	0	..	25	0	CASSIA LIONEA....per cwt.	80	0	..	84	0
SENNA, Bombay....	0	2	..	0	5	0	1½	..	0	5	Vera.....	27	0	..	60	0
Tinnivelly.....	0	2½	..	0	10	0	2½	..	1	4	Buds.....	117	6	..	122	6
Alexandria.....	0	3	..	1	4	0	3½	..	1	7	CINNAMON, Ceylon,					
SPERMACEIN, refined..	1	6	..	0	0	1	6	..	0	0	1st quality....per lb.	1	8	..	3	6
American.....	1	2	..	1	3	1	2	..	1	3	2nd do.....	1	6	..	3	0
SQUILLS.....	0	1½	..	0	3	0	1	..	0	2	3rd do.....	1	2	..	2	9
GUMS.											Tellecherry.....	2	7	..	3	0
AMMONIAC drop..per cwt.	80	0	..	130	0	120	0	..	180	6	CLOVES, Penang....	1	0	..	1	2
lump.....	50	0	..	80	0	60	0	..	100	0	Amboyna.....	0	7½	..	0	11
ANIMI, fine washed	240	0	..	290	0	300	0	..	340	0	Zanzibar.....	0	8	..	0	8½
bold scraped..	200	0	..	230	0	230	0	..	200	0	GINGER, Jam, fine per cwt.	100	0	..	200	0
sorts.....	120	0	..	220	0	160	0	..	260	0	Ord. to good..	54	0	..	95	0
dark.....	30	0	..	110	0	100	0	..	150	0	African.....	50	0	..	0	0
ARABIC, E. I., fine	60	0	..	70	0	70	0	..	84	0	Bengal.....	45	0	..	0	0
pale picked..	75	0	..	78	0	75	0	..	84	0	Malabar.....	44	0	..	0	0
sorts, gd. to fin	50	0	..	60	0	60	0	..	69	0	Cochiu.....	54	0	..	120	0
garblings....	20	0	..	60	0	25	0	..	50	0	PEPPER, Blk, Malabar, per lb.	0	7½	..	0	8
TURKEY, pick. gd to fin.	150	0	..	270	0	160	0	..	200	0	Singapore.....	0	7½	..	0	0
second & inf..	80	0	..	130	0	85	0	..	150	0	White, Tellecherry	0	0	..	0	0
in sorts.....	40	0	..	70	0	65	0	..	80	0	Cayenne.....	1	0	..	1	6
Gedda.....	20	0	..	40	0	30	0	..	42	0	MACE, 1st quality..per lb.	3	6	..	4	0
BARBARY, white....	50	0	..	57	0	0	0	..	0	0	2nd and inferior..	3	0	..	3	5
brown.....	30	0	..	40	0	39	0	..	44	0	NUTMEGS, 78 to 60 to lb.	3	2	..	4	3
AUSTRALIAN.....	27	0	..	45	0	30	0	..	46	0	90 to 80.....	2	11	..	8	0
ASSAFETIDA, com. to gd.	23	0	..	65	0	60	0	..	122	6	182 to 95.....	2	6	..	2	11
BENJAMIN, 1st qual.	180	0	..	490	0	180	0	..	500	0	PIMENTA.....	0	2½	..	0	3
2nd.....	140	0	..	210	0	150	0	..	210	0	VARIOUS PRODUCTS.					
3rd.....	60	0	..	85	0	65	0	..	85	0	COCHINEAL—					
COPAL, Angola red..	120	0	..	135	0	130	0	..	137	6	Honduras, black..per lb.	2	3	..	3	4
Benguala....	110	0	..	115	0	110	0	..	115	0	" silver.....	2	2	..	2	5
Sierra Leone..per lb.	0	3½	..	0	8½	0	3½	..	0	11	" pasty.....	2	0	..	2	1
Manilla.....per cwt.	13	0	..	25	0	20	0	..	37	6	Mexican, black....	2	2	..	2	5
DAMMAR, pale.....	48	0	..	52	0	56	0	..	59	0	" silver.....	2	2	..	2	3
EUPHORBIA.....	11	0	..	15	0	15	0	..	17	0	" black.....	2	2	..	3	9
GALBANUM.....per lb.	1	6	..	2	0	0	0	..	0	0	" silver.....	2	2	..	2	4
GAMBOGE, pickd pipe per cwt.	240	0	..	300	0	300	0	..	350	0	" black.....	2	2	..	2	6
GUAIACUM.....per lb.	0	8	..	2	6	0	9	..	2	10	" silver.....	2	2	..	2	4
KINO.....per cwt.	50	0	..	85	0	60	0	..	90	0	PUMICE STONE..per ton	120	0	..	150	0
KOWRIE, rough....	20	0	..	26	6	0	0	..	0	0	SOAP, Castile....per cwt.	33	0	..	34	0
scraped.....	27	0	..	37	0	0	0	..	0	0	SPONGE, Turk. fin pkd pr lb.	12	0	..	16	0
MASTIC, pickd.....per lb.	6	0	..	7	0	6	0	..	7	3	Fair to good..	4	0	..	11	0
MYRRH, gd. & fine per cwt.	125	0	..													



IN reference to a paragraph in this column last month, recommending borax for the slaughter of beetles, a correspondent informs us that the application is a very certain one if properly administered. It is best to use it in the lump, and it is necessary to get the animal between the stone of herax and the floor or other solid substance. The employment of some degree of force will then accomplish the object desired.—This seems to be "wrote surkastikul."

H. F., Gilding iron.—Rub the surface of the iron with sodium amalgam, then apply a strong solution of chloride of gold; on heating, mercury will be driven off, and the iron will be gilded. Silver and platinum can be applied in the same manner.

G. A., Court Plaster.—

R. Russian isinglass, 3j.

Water, 5j.

Alcohol, 3j.

Glycerine, 3ss.

Soak the isinglass in the water for one day, then dissolve it by the aid of a gentle heat, after which strain it and add the alcohol and glycerine. The mixture should then be spread on a fine quality of silk stretched on a frame, each successive coat being allowed to dry before applying the next. Heat should not be used in drying the plaster, as it is apt to drive the glycerine out and leave the plaster streaked.

Unguentum.—You can prepare glycerine ointment as follows—

R. Starch, 3ij.

Glycerine, 5x.

The starch, well powdered, is to be digested for an hour with the glycerine at the heat of boiling water. For many purposes this is an excellent preparation.

R. and Co.—We believe that you will find the following preparation possesses all the essentials of waterproof glue—

R. Gum sandarac

„ mastich

Turpentine aa, 3j.

Alcohol, 3j.

Dissolve the gums in the alcohol and add the turpentine; then beat the solution in a glue-pot to boiling, and gradually add a thick glue solution containing a little isinglass, and stir the whole constantly till of a homogeneous consistence, then strain.

J. J. M., Violet or Mauve Ink.—Mix one drachm of aniline mauve or aniline violet with one ounce and a-half of alcohol in a glass vessel; let it stand three hours. Then add thirteen ounces of distilled water, and subject the whole to a gentle heat until the alcohol has evaporated; add four drachms of gum arabic dissolved in three ounces of water, mix and strain.

The Druggists' Circular gives the following formula for Lea and Perrins' Worcestershire sauce—

White vinegar.....	15 gallons
Walnut catsup	10 „
Madeira wine	5 „
Mushroom catsup.....	10 „
Table salt.....	25 pounds
Canton soy	4 gallons
Allspice (powdered)	
Coriander „ of each	1 pound
Mace	
Cinnamon..... of each	3 pound
Assafetida	4 „ dissolved in
Brandy.....	1 gallon.

Boil twenty pounds of hogs' liver for twelve hours with ten gallons water, renewing the water from time to time. Take out the liver, chop it, mix with water, and work through a sieve; mix with the sauce.

Pharmacien.—We should recommend you to use the colourless arnica lotion, which is prepared as follows:—

R. Tinct. arnica, 3j.

Aqua dest., 3ij.

Liq. plumbi subacet., 3ij.

Mix and filter.

X. Y. Z.—An excellent liquid glue can be made by dissolving glue in nitric ether. The ether only takes up a certain quantity of glue, so you need not fear that the solution will become too concentrated. A few pieces of india-rubber of the size of a bullet put into the glue and well shaken; will dissolve in a few days, and add to the adhesiveness of the preparation, as well as protect it from the action of moisture.

A novel kind of ink, invented by Prof. Boettger of Frankfort, will be a valuable acquisition to travellers, exploring parties, etc. White blotting-paper is saturated with aniline black, and several sheets are pasted to form a thin pad. When wanted for use a small piece is torn off and covered with water. The black liquid which dissolves out is a good writing ink.

H. D. C. Wood has published the following original process for the

preparation of beef-tea, which he has found very satisfactory:—"Take thin rump-steak of beef, lay it upon a board, and with a case-knife scrap it. In this way a red pulp will be obtained which contains pretty much everything in the steak, except fibrous tissue. Mix this red pulp thoroughly with three times its bulk of cold water, stirring until the pulp is completely diffused. Put the whole upon a moderate fire and allow it to come slowly to a boil, stirring all the time to prevent the caking of the pulp. In using do not allow the patient to strain it, but let the settlings thoroughly into the fluid. One to three fluid ounces of it may be given at a time."

X. L.—Passing the Preliminary Examination does not incur any obligation to subscribe to the Pharmaceutical Society. That privilege optional, and the annual subscription for a registered apprentice is half a guinea; the advantages to be derived therefrom being the *Pharmaceutical Journal* and the right of having books from the library.

L. F. U.—You will find Stephens' stains answer your purpose thoroughly. They are prepared of all colours, and if too dark they can be diluted with water.

Gradatim Excelsior.—We do not understand the nature of the question contained in your communication, but if you will favour us with the original paper, we shall be happy to explain it.

Alpha.—"Gum Cowrie" is a fossil resin used for varnish-making, is the produce of *Dammara Australis*, and imported from New Zealand.

Excelsior.—The limit as to the first 134 pages of "Bentley" is quite relic of the past. The present regulations are unfortunately not very definite; but we should advise you to read up thoroughly the elementary structure of plants, the functions of the various parts of the flower, and to make yourself acquainted with the different kinds of fruits. To more intimate knowledge of the ovule and seed is reserved for the Major.

Roy.—(1.) We are not acquainted with any work specially devoted to electro-gilding, but you will find the subject fully treated of in Vol. iii. *Da La Rive's "Treatise on Electricity"* (Longmans). (2.) "Private Book for Goldsmiths," published by J. C. Hotten, about 4s. or 5s.

Dispenser.—The addition of chloral hydrate to cod-liver oil is said to render it less nauseous, and to prevent the night-sweats of the phthisical patient. 10 grains of the pure crystals should be digested with 190 grains of the oil in a sand-bath with gentle heat.

H. B. P.—The basis of all the popular hair restorers is sulphur and acetate of lead. You will find a complete analysis of those well-known to the public in the CHEMIST AND DRUGGIST for February, 1869.

R. F.—Beasley gives the following recipe for gingerade syrup for soda water:—

R. Syr. simplicis, 3vijss.

Ess. zingib. (1 to 4) 5ss.

Nt.

Errata.—On page 154, in the the third paragraph of Mr. Abraham's paper the figures 1.64 and 1.30 are repeated by mistake, and in the same page, in line 9 from the bottom, for 26.919 read 27.09.

The composition of Borwick's egg powder according to the *Anti-Adulteration Review*, is as follows:

Tartrate of soda (crystallized)	19.12
Free tartaric acid	6.97
Free bicarbonate of soda	38.16
Flour ash	0.10
Flour of rice (chiefly)	30.58
Moisture	5.07
	100.00

Ceratum.—According to Mr. C. C. Fredigke, Ung. Hyd. Oxid. Rn may be preserved for an indefinite time by keeping it beneath a layer of glycerine an inch thick. The Ung. Hyd. Nit. may also be prevented from becoming hard by incorporating with it, while warm, one-fourth its weight of glycerine in small quantities at a time. So prepared it will retain its fine citrine colour for a long period.

France.—The demand in Paris for English assistants unable to speak and understand the French language is not, we imagine, excessive. But you think it worth while to try, you will find this journal the best for your purpose, for it is read by the English chemists of the Continent more generally than are the French journals.

J. W. L.—You will find an article on "Sugar-Coating Pills" in the CHEMIST AND DRUGGIST for December, 1871.

German Cherry Juice.—We are sorry that we cannot give more satisfactory information respecting this product to the many correspondents who have written to us about it. Since we printed Dr. Miller's article describing how useful this juice has been found in America, there has been quite a demand for it in England. A small quantity was imported, but after the first arrival the customs' officers seized a small quantity of spirit contained in it, and demanded a duty of 14s. per gallon, which is, of course, enough to prohibit all business. In the United States a duty of rather less than 1s. is imposed, and a considerable quantity imported; but in this country it is thought wise to kill the goose that lays the golden eggs.

